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**THE INFLUENCE OF SELF-ESTEEM, HEALTHY LIFESTYLE AND LEARNING
ADAPTABILITY ON MENTAL HEALTH AMONG POSTGRADUATE STUDENTS
IN UNIVERSITI UTARA MALAYSIA (UUM)**

By



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In Partial Fulfillment of the Requirement for the Master of Human Resource
Management



**Pusat Pengajian Pengurusan
Perniagaan**

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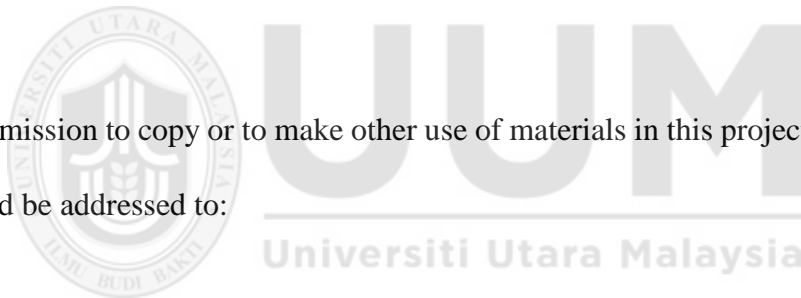
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ABSTRACT

This study mainly was to determine the factors such as self-esteem, healthy lifestyle and adaptability of learning had influenced mental health by examined the relationship between those variables. Data was obtained from 124 postgraduate students in UUM. The result were analyzed using Statistical Package for the Social Sciences (SPSS) version 25 and it has been shown that there were a positive correlation of mental health for self-esteem, healthy lifestyle and learning adaptability. However, none of the factors had influenced the mental health among postgraduate students respectively due to their awareness regarding to the importance of mental health conditions. As a recommendation, a university management need to take an initiative to create awareness program that collaborated with the Ministry of Health and Ministry of Education to prevent mental health problem by gaining high rate of awareness in the future. Thus, awareness attitude and the importance of mental health can be nurtured among students in Malaysia especially at university level.

Keywords: mental health, self-esteem, healthy lifestyle, learning adaptability

ABSTRAK

Kajian ini dijalankan untuk menentukan sama ada harga diri, gaya hidup dan kebolehsuaian pembelajaran mempengaruhi kesihatan mental dengan mengkaji hubungan di antara pembolehubah tersebut. Data kajian ini telah diperoleh daripada 124 orang pelajar pascasiswazah di UUM. Hasil kajian telah dianalisis menggunakan *Statistical Package for the Social Sciences* (SPSS) versi 25 dan hasil telah menunjukkan terdapat hubungan positif di antara harga diri, gaya hidup dan kebolehsuaian pembelajaran. Walau bagaimanapun, pembolehubah tersebut tidak mempengaruhi kesihatan mental dalam kalangan pelajar pascasiswazah kerana terdapat kesedaran dalam kalangan pelajar tentang kepentingan keadaan kesihatan mental mereka. Oleh itu sebagai cadangan, pihak pengurusan universiti perlu mengambil inisiatif untuk mewujudkan program kesedaran bergandingan dengan Kementerian Kesihatan dan Kementerian Pendidikan untuk mencegah masalah kesihatan mental agar mencapai kadar kesedaran yang tinggi pada masa akan datang. Justeru, sikap kesedaran dan mementingkan tahap kesihatan mental dapat dipupuk dalam kalangan pelajar di Malaysia terutamanya pada peringkat universiti.

Kata kunci: kesihatan mental, harga diri, gaya hidup, kebolehsuaian pembelajaran.

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ABBREVIATION

American College Health Association	ACHA
Healthy Lifestyle	HL
Learning Adaptability	LA
Mental Health	MH
Malaysia Mental Health Association	MMHA
Othman Yeop Abdullah Graduate School of Business	OYAGSB
Social Cognitive Theory	SCT
Self-Esteem	SE
Universiti Utara Malaysia	UUM
World Health Organization	WHO



CHAPTER ONE

INTRODUCTION

1.1 Introduction

Mental health refers to how an individual think, feel and act as a reaction to the life's situations that they faced (Glen Xiong, 2018). Mental health also was more than just the absence of mental illness of any individual. Therefore, mental health was important at every stage of life which started from childhood stage, adolescence and as well as also on adulthood stage.

Additionally, issues of mental health among university students is increasingly worldwide. Therefore, there are numerous mental health issues that experienced by college students which include anxiety, depression and overwhelming stress (Dounce & Keeling, 2014; WHO, 2016). On top of that, it supported by Holmes (2019) that approximately about 20% of individuals will directly experience a mental illness during their lifetime.

According to previous research, mental health plays a vital role in the development of the social and emotional capacities of a student as well as being a key influential factor in potential academic success (Pain, 2018). Furthermore, due to that educational institutions need to take an action to address mental health crisis in graduate education to avoid any other extreme consequences due to the increasing number of mental health problem facing by students.

1.2 Background of the Study

University students have high potential in terms of their contribution to the country's workforce. Therefore, mental health plays an important role in ensuring that nations can use

high potential talent to develop a better country in future. However, the current situation shows that mental health is a global phenomenon that affects the normal function of the individual. In Malaysia, the depressive disorder is significantly about 5.6% among university students, and it is also a major cause to the incident of suicide among university students (Suleiman, Farhan Ismadi, Fahad, Khadeeja & Muhammed, 2017). According to Suleiman et al., (2017), it was found that about 13.8% of university students were feeling depressed and it influenced their normal mental health and moreover students who suffering from stress for two consecutive months will also have negative side effect on their normal function too.

Furthermore, statistics by the Ministry of Health reveal a worsening state of mental health which is from one in 10 individuals in the year 2011 to one in five individuals in the year of 2016, especially among Malaysian students. (New Straits Times, 2016 September 12). On top of that, it was supported by the experts which if the mental health problems were not addressed within two years, it has high possibility to turn out to be more extreme particularly in taking individual's own life.

Therefore, the significant sources of stress in Malaysia particularly among student are mostly on the pressure of heavy workload where it might cause destructive impacts on their mental health (Malaysian Mental Health Association, 2017). The number of cases identified with mental health problems among students is increasing each year (Zivin, Eisenberg, Gollust and Golberstein, 2009). As indicated by the World Health Organization (WHO), mental health issues have a high possibility to increase by 15% on the year of 2020 and young people are the group most at risk of encountering this issue. In general, mental health refers to the feeling about ourselves, how we feel about the other people and how to deal with the demands of life's situation (MMHA, 2017). Additionally, as indicated by MMHA (2017), mental illness may

affect anybody at any age level and may significantly weaken an individual's ability to form their daily activities. Along these lines, it is essential to get a reasonable and clear picture on types of the disease and increase awareness about issues related to unhealthy mental health, especially among university students because they are the person who have higher chances to face with mental health problem.

The mental health issues among postgraduate students are already a presence in the Malaysian context for quite a while. It was reported that depression is the second biggest cause of disability after cardiovascular disease. However, in Malaysia depression was anticipated to be the primary source of disability by 2030 (The Star, 2018). Thus, none of any educational institution was immune to the mental health problem among their students. The 1996 Malaysian National Health survey revealed that most of adults suffered minor types of mental illnesses such as stress, anxiety and extreme stress during their lifetime. Among all the mental health problems, anxiety was the most common in Malaysia followed by depression, bipolar disorder and schizophrenia. Additionally, it was about 4.2 million Malaysians were suffered and experienced some mental health issue in their life (The Star, 2018).

On top of that, the National Health and Morbidity Survey 2015 by the ministry showed that the predominance of mental health issues with the percentage around 29.2% was among adults which is the age range above 16 years old (The Star, 2018). In the same time, National Health Morbidity Survey 2015 also demonstrated a higher predominance of mental health problems among the age of 16 and above have tremendously increase by 18.6% from the year 1996 to 2015. Despite of that, this issue undoubtedly keep increased in the next coming years if mental health problem not been address as soon as possible.

Nowadays, with the high expectations on students to perform various heavy roles in the context of their study also may positively contribute to the factor of heavy stress faced by students (Hamizah, Masoumeh, Seyed and Atefeh, 2018). It was expected to happen due to the fast-paced current environment that involving technology, education, culture and society. Therefore, the present period of students right now was significantly more stressed and anxious compared to students from the last generation.

Furthermore, another major factor that caused mental issue among students was on managing their daily lives particularly related to university lifestyle. The American College Health Association (ACHA, 2014) discovered that 22% of students shown that anxiety affect their academic performance within the past 12 months, while in the factor of depression it shown around 14% that also will influenced the academic performance. Afterward, on the year of 2015 ACHA found that almost of 30% of students demonstrate that stress factor can positively contribute to mental health problems and at the same time will give adverse effect to their academic performance.

All in all, in this study the researcher concentrate on self-esteem, healthy lifestyle and learning adaptability. Therefore, this research was examined the factors that influence mental health among postgraduate students at University Utara Malaysia (UUM) through self-esteem, healthy lifestyle and learning adaptability. The details had been discussed in the next section.

1.3 Problem Statement

According to Eisenberg, Gollust, Golberstein and Hefner (2014) university students become more significant for developing mental health issue due to changes in emotional, social environment and behaviour. Moreover, as stipulated by Rodgers and Tennison (2009), during

the university years, an individual deal with a lot of pressures and difficulties that represent a variety of emotional, physical and social challenges which sometimes give stress effect for them on the certain matters. Therefore, a plenty of research has concentrated on the study of mental health problems among university students, and it was discovered that there is a significant number of university students who already experience on mental health issues (Seim & Spates, 2010). This been proved by Kirsh, Friedland, Cho, Gopalasuntharanathan, Orfus, Salkovitch and Webber (2016) from the student responses uncovered that 45% of respondents "felt hopeless", 50% felt "overwhelmed by tension and anxiety", 30% were feeling "so discouraged and difficult to function," and 7% had considered suicide within the past 12 months. For these reasons, the percentage of students with moderate to severe depression has up from 34% to 41% (Seim & Spates, 2010). So, it demonstrated that the number keeps expanding on university students who facing mental health issues as well as right now it already at severe stage.

Furthermore, there was a minimal research accessible about the factors that contribute to mental health problems among students at university in developing countries particularly in Malaysia. Be that as it may, even though many research studies have been conducted toward young people, but there is still a limited and lack of data about universities' students who are facing with a mental health issue (WHO, 2016). This situation happens in Malaysia where only a few research been done towards mental health among university students (The Star, 2016). It has also been supported by the Malaysia Mental Health Association (2011), local research on mental health was still lacking, so Malaysia must invest more in mental health.

Notably, developing countries were lacking research in this field especially in term of self-esteem. Indeed, the nature of self-esteem may vary from one culture to another one especially

between developed and developing countries (United Nations Development Program, 2016). In general, Western countries have higher self-esteem than Asian countries because they describe themselves have more positive value compared to Asians people, but there is no difference regarding anxiety matters (Cai, Brown, Deng & Oakes, 2016). Therefore, this might reflect differences in self-esteem levels between developed and developing countries.

Next, regarding to the healthy lifestyle factors, there is impressive literature documenting the relationship between lifestyle and mental health where lifestyle factors additionally seem to play a role in diminishing risk of mental illness (Knowlden, Hackman & Sharma, 2015). The higher the amount of contribute toward a healthy lifestyle would bring down the level of mental distress (Jacka, 2015). As indicated by Velten, Bieda, Scholten, Wannemuller and Margraf (2018), a healthy lifestyle will present the quality of one's life, and it also linked to the ability for success and in the meantime lifestyle can positively contribute to reduce a symptom of depression as a mental health issue in an effective way. Therefore, this study deeply investigated the context of Malaysian lifestyle especially students in term of their mental health at university level.

Although there have been numerous studies concerning student's adaptation, there is only through some view of literature. According to Salina Abdullah and Hamidah Sulaiman (2014) adaptation can happen not just when there is a highly threatening event, yet additionally in regular day to day existence too. Therefore, the significant to study students' adaptability of learning was to investigate the capacity of the students in controlling their environment and surrounding. Normally, students had faced a challenges in cultural experiences and everyday activities in which this revealing a significant gap in this study.

Therefore, these issues should be explored as well as university students are viewed as the future heads of a country. This study attempts to investigate the influence of variable names as self-esteem, healthy lifestyle and learning adaptability on mental health among postgraduate students at UUM.

1.4 Research Questions

This research was conducted and intends to examine the relationship between self-esteem, healthy lifestyle and learning adaptability on mental health among postgraduate students in Universiti Utara Malaysia (UUM). As a result, this study was undertaken to answer the following questions:

- i. Does self-esteem related to mental health?
- ii. Does a healthy lifestyle related to mental health?
- iii. Does learning adaptability related to mental health?

1.5 Research Objectives

The general objective of this research was to determine the factors that influence mental health among postgraduate students of UUM via self-esteem, healthy lifestyle and learning adaptability. By examining these relationships, there was a greater understanding of mental health among postgraduate students of UUM. In particular, this research was attempted to focus on the following objectives:

- i. To examine the influence of self-esteem on mental health.
- ii. To examine the influence of healthy lifestyle on mental health.
- iii. To examine the influence of learning adaptability on mental health.

1.6 Significance of the Study

The significance of this research was to add literature study on mental health issue among postgraduate students in a Malaysian context. Besides that, it was also designed to provide the top management of university to have insight information about the effects of self-esteem, healthy lifestyle and learning adaptability to the student's mental health. Therefore, untreated the problem of mental health may destruct student's productivity in academics and social life as well as university achievement and reputation.

Theoretically, the researcher hopes that this research has helped other individuals to prove the theory as well as supported the future research to produces an idea for further investigation. Furthermore, it was also give an additional understanding of how self-esteem, healthy lifestyle and learning adaptability characteristic influenced mental health among postgraduate students of UUM. This study offers knowledge and information concerning mental health and its contributing factor in which intends to be relevant especially in UUM.

Practically, this study had created an idea with the end goal to serve postgraduate students who were facing mental health problem during their study in UUM. Besides that, this study also able to give a significant contribution to Othman Yeop Abdullah Graduate School by grasping this idea to come out with a program of mental health awareness in making postgraduate students are far away from a mental health issue and able to enjoy their study journey.

1.7 Scope of Study

The study was conducted and focused on UUM students only. The importance of choosing UUM for this study because the researcher wants to know either the factors are affecting students' mental health during their study. Apart from that, the researcher has selected the participants from Othman Yeop Abdullah Graduate School of Business (OYAGSB) which were UUM postgraduate students and not including PhD students. The strong reason why the researcher was focusing on postgraduate students because mostly postgraduate students were having a multiple role as individual while at the same time also need to focus on their study matters. In the meantime, these type of students have a huge responsibility in many matters and need to maintain their mental health in a long period to be able to function well. The studies variables involve self-esteem, healthy lifestyle and learning adaptability.

1.8 Definition of Key Terms

1.8.1 Mental Health

Mental health is an individual's capacity to adapt with and change in accordance to the recurrent stresses of everyday living while mental illness results from a failure to adapt with an overwhelming circumstance (Goldberg, 1978).

1.8.2 Self-Esteem

Self-esteem is a component of self-concept which Rosenberg (1965) characterizes as " totality of the person's thought and emotions with reference to himself or herself as an object, and besides self-esteem, self-efficacy and self-personalities are a critical piece of self-concept.

1.8.3 Healthy Lifestyle

Healthy lifestyle reflects on an enabled individual on capable of controlling stress and settling on decisions that related to lifestyle factors examined on dietary habits, substance abuse, physical exercise and sleeping quality (Darviri, 2014).

1.8.4 Learning Adaptability

Learning adaptability is about able to adjust to changes by learning the environment and also behaviour (Midgley, 2000).

1.9 Organization of Research Paper

This chapter briefly explained a brief introduction, research background, problem statement, research questions, research objectives, scope of the study, significant of study, a definition of key terms and organization of dissertation report.

Chapter two contains the arguments and discussion from past literature related to this research. It begins with introduction, dependent variable (mental health) and followed by three independent variables namely as self-esteem, healthy lifestyle and learning adaptability. After that, it covered by underpinning theory and research framework. Henceforth, three hypotheses have been formulated based on literature discussion.

Chapter three clarifies the exact steps that were undertaken to address the hypotheses and research questions. Further explanation on research design, study population and sample size, sampling technique, data collections procedure, e-survey layout, goodness of measurement, measurement of variables, statistical design and analysis that will be conducted to test the proposed framework.

Chapter four revealed the current study finding which is through data analyses.

Lastly, chapter five emphases on a discussion of the overall study and summarize the implication to knowledge and practice of study conducted and suggestion for future research.

The recommendation will focus on how university's management may improve mental health issue among their students.



CHAPTER TWO

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Introduction

This chapter identifies available and significant literature from an assortment of sources. The review contains a summary of the relevant literature on the topic of the effects of self-esteem, healthy lifestyle and learning adaptability on mental health among postgraduate students in University Utara Malaysia (UUM).

This research first defined the concept of mental health which consists of four dimensions such as depression, anxiety, hopelessness and life satisfaction, then provide a general view of mental health from previous literature. Next, it were bounded with the subsection of underlying theory for both the dependent and independent variable (Social Cognitive Theory), past literature review on self-esteem, healthy lifestyle and learning adaptability together with research framework and hypotheses development.

2.2 Definition of Concept for Mental Health

Since the year of 1948 where the World Health Organization (WHO) first presented the idea of mental health concept and a wide range of various definitions of mental health have been displayed. At this point, the idea is appropriate for the scope of disciplines. Therefore, all of these have a slightly different interpretation but in the end, it still relates to the basic frame of attitudes, beliefs and practices. For this purpose, Faculty of Public Health (FPH) utilizes the term of 'mental health' to describe this field which includes mental wellbeing, mental illness or disorder and every single other condition of mental health (WHO,2014)

As stipulated by Smit (2015), mental health has commonly been understood as a concept connected with mental disorders. However, mental health can be derived from a more general point of view that additionally involves a positive dimension from those concepts (World Health Organization, 2016). Despite that, a general concept of mental health can be connected to the ability of an individual to have a developmental element in themselves, dealing with the conditions of their life and take part in the community social life by giving their full commitment into it (WHO, 2014).

Furthermore, according to Hayes, Blashki, Wiseman, Burke and Reifels (2018), mental health not just only refer to mental illness, mental disorders or mental problem but yet also it incorporates about mental wellness, psychosocial wellbeing and emotional strength. A various number of factors including socio-demographic, adaptability and a way of life were observed to be related with mental health in university students (Latiffah Latiff, Adzdzin Aszahari, Fatihah Khalek, Kon and Normala Ibrahim, 2014).

While as found by Mozar and Farag (1967), mental health brings the meaning of individual's capacity and adjustment to shape with a condition to live as they want to face and to do something with a sensible measure of satisfaction, efficiency and achievement. According to WHO (2016), characterizes the mental health as a condition of well-being in which each individual understands their very own potential, can cope with the ordinary stresses of life, able to work gainfully and productively and can make a full commitment to their communities as a whole. Accordance with having a healthy life for all people, the linked between social health, mental health and physical health is crucial for each individual. It is becoming up progressively where having great mental health is vital to every individual as a whole.

On the contrary, in Malaysia through the Ministry of Health (MOH), (2007) has characterized mental health as “the ability of individual, the group and environment to connect with each other to promote subjective well-being and ideal functioning, the utilization of cognitive, social capacities towards the achievement of individual and collective objectives consistent with justice”. This definition is different compared to what WHO stated. Again, the definition by MOH demonstrates more on collective nature. This all follows back to the setting of a multicultural country of Malaysia with each culture have their perspective and belief about the concept of mental health (Deva, 2004).

Ultimately, mental health and mental illness can be classified as two connected concepts and derived from that, all conditions between mental health and mental illness can be characterized as mental health issues (Smit, 2015). Mental health problem is not equivalent to mental illness, but in the meantime, both of that cannot be isolated from one another (Smit, 2015). Furthermore, the concept of mental health can be portrayed and conceptualized differently in various cultures, societies and communities. On top of that, there are different ways to approaches nature and factor variables of mental health problems that may give a result to determine the definition of what mean by mentally healthy.

Mainly there was a history of mental health stigma, and the rate continuously keeps rising among the university students range aged between 20-25 years give a massive reason behind this concern to investigate about the mental health of university students (Cook, 2007). According to Brain, Wrap and Surfers (2013) found that between 10% to 20% of the student population will experience from mental health problems likewise on depression, anxiety and stress. Commonly, the basic mental health problems seen among university students include low self-esteem, depression, anxiety, self-destructive and reckless behaviours (Cook, 2007).

Assessment on measuring of self-esteem is not that simple since it is a complicated concept to evaluate for research. As indicated by Sherr, Roberts and Croome (2017), the previous situation of stresses may be added to self-esteem. As mentioned by Rosenberg (1965), self-esteem is a complex psychological concept, hard to characterize and challenging to assess and to research. Here, self-esteem is an overall evaluation of individual characteristic about his or her emotions believe and perception for instance "I am a good student in general", "I feel that I have several of good qualities" or "Overall, I am satisfied with myself". The social learning scholar defines self-esteem as an individual's global judgments about him or herself including dimensions of self-worth, self-acceptance and self-respect (Rosenberg, 1965). As shown by UK Essays (2018), past research has uncovered that individuals respond on failure conditions as indicated by their dimension of self-esteem more particularly individuals those have low self-esteem are more sensitively hurt and discouraged by failure.

Now at this point, depression, anxiety, hopelessness and life satisfaction can be taken care as the dimensions of mental health (Guney, Kalafat, and Boysan, 2010). Depression is a condition which is the feeling of low state mind that goes on for quite a while and influences individual regular daily life. It can make the individual feel hopeless, miserable, useless, and worthless and exhausted (Guney et al., 2010). As a result, it can influence sleep, physical and mental health and also individual self-esteem. Next, anxiety is the thing the individual feel when stressed, worried or afraid especially about things that are going to occur or something that could happen later on (Brain, Wrap and Surfers, 2013). Commonly, a feeling of anxiety can be considered as ordinary human experience. Be that as it may, if the individual has a high feeling of anxiety and been keep going for a quite a while it can result in overwhelming. Due to that,

individual may likewise encounter physical symptoms for instance panic attacks and sleep problems.

Hopelessness is firmly connected to mental health, emotional, and physical health. Hopelessness might be a side effect of various mental health conditions. Sometimes, it also might happen due to negative life occasions, distressing and disappointing. According to Hamzaoglu, Ozkan, and Ulusoy, and Gokdogan (2010), hopelessness is portrayed as a feeling of negative assumptions regarding the future and close to an individual's personal goals. Besides that, hopelessness also derived from a few mental health disorders, for example, low subjective wellbeing and depression. As indicated by Lombardo, Jones, Wang, Shen, and Goldner (2018), states that life satisfaction is a general model or ultimate result from human experience. Thus, life satisfaction is a general evaluation of feelings and attitudes about individual's life at a specific point from negative to positive. Hence, life satisfaction is portrayed as a concurrence with the theory of cognitive which is "a person's cognitive judgement about comparisons on the compatibility of their possess living conditions with the standards" (Bandura, 1963).

Previously, according to Headey, Kelley and Wearing (1991) mental health also have four measurements but in term of positive affect, anxiety, depression and life satisfaction. Indeed, life satisfaction has been found as having critically significant with the depression and anxiety among university students.

2.3 Previous Studies on Mental Health

The two types of health that most normally discussed are between mental and physical health. Besides that, there also have some addition in term of emotional health, spiritual health and financial health (Christian, 2017). All these have likewise been connected to bring down the feeling of anxiety and mental issue. According to Christian (2017) physical health includes seeking after a healthful lifestyle to diminish the danger of disease. While for mental health alludes to an individual's social, emotional and psychological prosperity. Here, mental health is considering as essential as physical health in order enable to have a dynamic and active lifestyle. As stipulated by other studies, it is harder to characterize mental health and physical health in which mental health more relies upon the individual's view of their experience toward their own lifestyle whereas physical health can be seen externally.

The quantity of students dropping out of university courses due to mental health has increased essentially in recent years. Data demonstrates that about 1,180 students with experienced mental health left courses early in 2014- 2015, and up 10% from 2009-2010 (Ella, 2017). Even though, mental health issues have been considered as common things among students but anyway it is something that only a few individuals want to acknowledge or accept that they are suffering from mental health problems.

Furthermore, mental health concern has high possibility to turn into a mental illness or side effects cause of pressure and will influence the individual capacity to work. Mental health rely upon the quality of the environment where social standards, characteristic and constructed cultural form (Ella, 2017). It represents the positive side of mental health with the nonappearance of mental illness and mental disorder.

In a previous couple of years, a great deal of consideration has been committed to mental health in university life. Fundamentally explored from students, poor mental health has been increased widely all around the world which appears as university students are not mentally well (Paul, 2018). As indicated by Paul (2018), studies demonstrate a large proportion of students experience high levels of depressive symptoms. Poor mental health at university is considered a significant issue since it influences how students learn but because of it also can impacts whether they really can complete their studies or not. Ultimately, the side effects of poor mental health will influence the career potential and whole lives of students significantly. Furthermore, a study has shown that university students have a limited understanding of mental health issues and also there are reluctant to look for help as one of the support systems. It might be said at that point, a culture of “silence of mental health issues within university environments” actually exists (Paul, 2018).

A few studies that have tended to mental health issues among graduate students had officially alarming results, yet the message is not getting out yet. There is still an educational institution that believes and trust they do not have an issue on this mental health. Regardless, any person who works with graduate students on an everyday basis realizes that mental health issues are common among their students. (Chris, 2018).

Additionally, the risk of university postgraduate students having or developing mental-health problems is generally higher than many other populations. Most of the identified literature on relationship related to mental health conditions among postgraduate students in university have little evidence on the extensive proportions which more than 40% of postgraduate students report symptoms of depression, emotion or stress-related problems, or high levels of stress (Susan, Catherine, Janna, Sarah, Anna, & Joanna, 2017).

Mental health is not just the absence of depression, anxiety, or another disorder but in the meantime, it likewise relies upon the capacity of appreciating life, adjusts to difficulty and accomplishes potential (Christian, 2017). Therefore, physical and mental health are positively connected. If the serious illness influences an individual's capacity to complete their errands, this may promptly lead to stress and depression. It is critical to approach "health" in general as opposed to its different types. According to Medical News Today (2017), WHO recommends that the elements may give a greater effect on health are on the condition of the surrounding environment, education level, where an individual lives and relationships with friends and family.

2.4 Underlying Theory

Theory of social learning was proposed by Miller and Dollard (1941). After that, Bandura and Walters (1963) expanded the social learning theory with the standards of observational learning. Afterwards, Bandura (1963) gave his idea on the concept of self-efficacy in the year of 1977 while he also disproved the training learning theory for understanding learning. The social cognitive theory clarifies how individuals gain and maintain specific behavioural patterns, while likewise giving the basis for intervention strategies (Bandura, 1997). So, assessing behavioural change relies upon the elements of the environment, people and behaviour.

Social cognitive theory indicates a major set of determinants and an ideal method for making an interpretation of this knowledge into powerful health practices. The major determinants are incorporate knowledge of health risks and advantages of various health practices, declare self-efficacy that one can practice control over individual's health habits, result in assumptions

regarding the expected costs and advantage for various health habits, individual health objective set for themselves and solid plans and systems for acknowledging them (Bandura, 2004).

As found by Rosemberg (1965), social learning theory describes self-esteem as an individual's about themselves including the elements of self-worth, self-respect and self-acceptance. This able to link with this study's main idea that self-esteem is an overall evaluation of individual characteristic about themselves on emotions believe and perception whether in the positive or negative ways.

While the element of environment refers to the variables that can influence an individual's behaviour, thus it includes social and physical environments. Social environment incorporate family members, friends and colleagues. While for physical environment it is more focus on physical things like the accessibility of specific things. Along with this line, in this study the component of social was applied as this declare that university students must ready to adapt with their present conditions to be associated with others people and avoid any negative thought that might affect their mental health. A noteworthy component of this theory is observational learning which is the way toward learning desirable and undesirable behaviours. Particularly observational learning has been done by observing and at that point duplicating learned practices.

The Social Cognitive Theory (SCT) is significant to health communication (Bandura & Walters, 1963). To begin with, the theory manages with cognitive, emotional and aspects of behaviour for understanding behavioural change. Second, the concepts of SCT give approaches to new social research in health education. According to Vinney (2019), SCT is about a

framework for understanding how individuals effectively shape and are formed by their environment. There is a high relationship between SCT and outcome expectancies (Bandura, 1997). The condition that the individual experiences are a significant factor that intensively impacts outcome expectancies. Human adaptation and change are established in social systems.

An impression of self-efficacy impact individuals' decisions and beliefs in themselves, including the objectives they seek to pursue and the effort they put into themselves, to what extent they are willing to endure notwithstanding with obstacles and the result they anticipate (Vinney, 2019). Subsequently, self-efficacy impacts one's inspirations and belief to perform various actions and their capacity to do as such.

There are such convictions that can impact self-improvement and change. For instance, upgrading self-efficacy convictions is bound to result in the improvement of health habits than the utilization of fear-based communication. Belief in one's self-efficacy can be the contrast whether an individual even thinks about rolling out positive improvements throughout their life. Thus, SCT can explain the reason why university students decide to have a healthy lifestyle or unhealthy lifestyle in their university life such as Rural Health Information Hub found that SCT likewise been used to build independence and create healthy behaviour among individual. It is much of the time used to direct conduct behaviour. Here and there, it might be especially valuable for looking at how individuals interact with their surroundings. Besides that, the SCT also can be utilized to comprehend the impact of social determinants of health and an individual's past encounters on behaviour change.

In short, self-esteem, healthy lifestyle and learning adaptability have reciprocal with mental health which reflects this study's objective on explaining the effect of independent variables

on dependent variables. SCT theory underlying the frame of mental health, self-esteem, healthy lifestyle and learning adaptability.

2.5 Factors Affect of Mental Health

2.5.1 Self-Esteem

Self-esteem plays a considerable role in the self-concept and mental development of an individual. Self-esteem was a famous area of research in Western countries from the 1960s to the 1990s. Accordance with Bandura (1977), social cognitive theory expresses on each individual has a self-framework which empowers them to enable to control their thoughts, emotions, actions and motivation. Subsequently, it also allows them to estimate their capacity to complete things. Therefore, as refer to such concept and emotions are typically alluded as self-esteem.

Self-esteem is one of the essential variables that help in learning outcomes. Notwithstanding, to examine self-esteem as a result of social forces, self-esteem has frequently been examined as an independent or mediating variable. This because self-esteem been considered as a fundamental part of the self, as personal well-being and prerequisite for educational achievement. In this manner, as indicated by Essays UK (2018) at the university level, understanding the emotional needs of students is vital since students mental health connected with progress to success and students' retention rates.

Numerous studies have investigated the prospective effect of self-esteem on mental health. For example, Robert (2008) evaluated participants by conducted using university students as samples frequently examining responses to stressful academic events where the result found that the predicted depressive reactions among students are on low self-esteem and

receiving a poor grade. Moreover, similarly there are another two studies have discovered that self-esteem prospectively predicted depression after stressful academic events.

In a previous study utilizing a large sample of students, low self-esteem significantly predicted to have mental health over a nine-month interval even after controlling for the event of stressful life events and other different variables. According to Metalsky, Joiner, Hardin and Abramson (1993), numerous studies have been conducted using university student's samples and regularly investigating responses to stressful academic events which might give impact to students' health. Thus, here it can be said that the problem of self-esteem among university students already exist 20 years back where at last it might impact to students' mental health as an outcome from a stressful environment. Even though the problem of self-esteem existed 20 years back but it has differences level of self-esteem between Western countries and Asian countries where Western people describe themselves have more positive elements in themselves (Cai et al., 2016).

According by Boucher (2010), Asians scoring higher in self-esteem indicated significantly higher anxiety compared to Western concerning to the anxiety scores. Conversely, Landazabal (2006) have demonstrated the inverse relationship between self-esteem and anxiety that propose students with high self-esteem showed low dimensions of anxiety that directly connected to their mental conditions. Above all, this kind of idea actually promoted that the higher the self-esteem of an individual has can help themselves to have better skills to deal with the stressful event. On top of that, the higher self-esteem tends to gain positive attribution style which in general expected to gain a more positive outcome.

2.5.2 Healthy Lifestyle

In the year of 1948, the World Health Organization (WHO) characterized health with a phrase that is as yet utilized until today. Thus, "health is a condition of complete mental, social and physical prosperity and not only the non-appearance of disease or sickness" (WHO, 1948). But in the year of 1986, WHO make clarified further that health is "a resource for regular daily existence not the goal of living". Health is also a positive idea emphasizing individual resources as well as physical ability and social. This implies that health is an asset to support an individual's capacity and due to that, a healthful lifestyle gives the way to have a full existence.

Based on information provided by WHO (2016), a healthy lifestyle means to take part in ordinary physical activity, and to be more precisely Velten, Bieda, Scholten, Wannemuller and Margraf (2018) characterized lifestyle also can positively effect on symptoms of depression, anxiety and life satisfaction when healthy lifestyle not occur in one's life.

"Lifestyle" was defined as it is a way of style or life of living that reflects the attitudes and values of a person or group in their daily life doing their matters. Meanwhile "healthy" can be characterized as having or demonstrating great health in body or mind and also free from sickness or disease. Therefore, the simple definition of a healthy lifestyle as stipulated by Sanhueza, Ryan and Foxcroft (2013) bring the meaning of an individual habit are without a doubt to have good mental health. According to Dumuid (2017) expresses that lifestyle is a general word as it includes nearly everything an individual does throughout his or her daily life. For instance, in a few studies the idea of lifestyle is limited to its negative side in which it demonstrates few students' bad habits can give impact to their mental health.

Lifestyle factors likewise seem to play a role in mental health (Knowlden, Hackman & Sharma, 2015). As supported by Almutairi, Alonazi, Vinluan, Almigbal, Batais, Alodhayani and Alhoqail (2018) a lifestyle is a method for living that could be considered either healthy or unhealthy relying upon individual behavioural decisions and choices. A few studies propose that the transition to university life makes students vulnerable to adopt unhealthy routines (Aceijas, Waldhäusl, Lambert, Cassar, & Bello-Corassa, 2016).

This negative behaviour happen not exclusively individual choices but also contribute by environmental as well too. Indeed, students are impacted by the social environment particularly on attitudes and behaviour of their peers, stress and academic pressure and time accessibility. Therefore, the study demonstrated a poor routine of healthy lifestyle among university students have high responsive to mental health (Aceijas et al., 2016).

2.5.3 Learning Adaptability

Here adaptability refers to the degree to which individuals can adjust their thoughts, actions and emotions to suitably react to and deal with the changing, new and uncertain demands of a university (Martin, Nejad et al., 2013). Adaptability has a positive effect among university students where most of the university students need to face common experiences such as individuals attempt new tasks, faced with uncertainty and also experience major changes. In this manner, a focus on adaptability among university students is timely and important.

As indicated by Saleem (2013), adaptation alludes to the individual arrangement between reality, thoughts and the inside culture that might emerge from different ideology. Thus, afterwards individual attempts to adjust to accomplish that sort of harmony between themselves and the surrounding environment. An individual's adaptation lead to the balance

in the relationship of a condition, friends at university and which continuously will expand their achievement of goals.

The process of adaptation happens as an interaction between the individual and surrounding all together to fulfil the intention and incentives. Therefore, the process of adaptation must incorporate with changing process in behaviour to fit well with surrounding changes. Furthermore, individuals also should integrate with mental reactions that can alter their behaviour for reacting to these changes.

As mentioned by Jambroes, Nederland, Kaljouw, Vliet, Essink-Bot and Ruwaard (2015), adaptation should be considered as major requirements to be healthy. However, in specific conditions, the process of adaptation can oppose the negative effects in view of pressure faced by one's individual (Malti, Noam, Beelmann, & Sommer, 2016). Jambroes et al., (2015) also stresses that individual need positive support to adapt to a healthy lifestyle whereby having that it might increase an individual's adaptability including education, health promotion and health protection.

For instance, human life is a continuous adaptation to the conditions of a continuously changing environment. It is about the improvement of new forms of behaviour for achieving specific objectives. Thus, learning can occur at various dimensions which are developing reactive behaviour, operant behaviour, cognitive learning and conceptual behaviour (Tarasova, Dukhina, Kolesnikova, & Makhova, 2017). In this way, in the student age, the most various forms of learning occur in cognitive learning.

These days, the issue of learning adaptation among students in higher education remain incredibly topical. As indicated by (Tarasova et al., 2017) the issue of adaptation is on the grounds blocking of internal discomfort and the opportunity of learning outside the conflict zone. Therefore, adaptation is a multidimensional and multifaceted concept where adaptation should be considered as a process of modification of the creature (physiological adaptation) or personality (mental adaptation) to a change in the environment (Tarasova et al., 2017)

The vast majority of data show that university students have multiple roles and these multiple roles may affect students' ability to perform well and in the meantime also affect their adaptation to university (Reed & Kennett, 2017). Hence, due to that it naturally can influence their learning adaptability about meeting academic challenges. Beyond the multiple roles taken by many university students making their adaptation to university more difficult and increase students stress.

Based on student experience survey demonstrates that around nine in 10 (87%) of the first year student think that it's hard to adapt to social or academic aspects of university life where students are unsure of what to expect (Jon, 2017). Additionally, as indicated by Jon (2017) the stress of studying is a key area in which students struggle with almost six out of 10 demonstrated that this made it difficult for them to adapt. On the other troubles that highlighted essentially included isolation (44%), balancing work and study (37%), financial difficulties (36%) and living independently (22%) and it found that a lot of other students struggle with their lifestyle and behaviours (Reed and Kennett, 2017).

Learning adaptability of university students incredibly relies upon how they could adapt to internal and external conditions of life. As indicated by Tarasova et al., (2017) the elements that affect the adaptation of students include psychological, pedagogical and sociological. Thus, the same authors mentioned, psychological factors include individual adaptive potential, pedagogical about learning environment and sociological considered on matters of age, kind of educational institution and social inception of the students.

2.6 Research Framework

Research framework can be classified as the main basis on what the whole research paper been founded through the investigation (Sekaran and Bougie, 2013). Along with this line, the dependent variable in this study is mental health, and independent variables are self-esteem, healthy lifestyle and learning adaptability. The linkage of variables is shown in Figure 1.1.

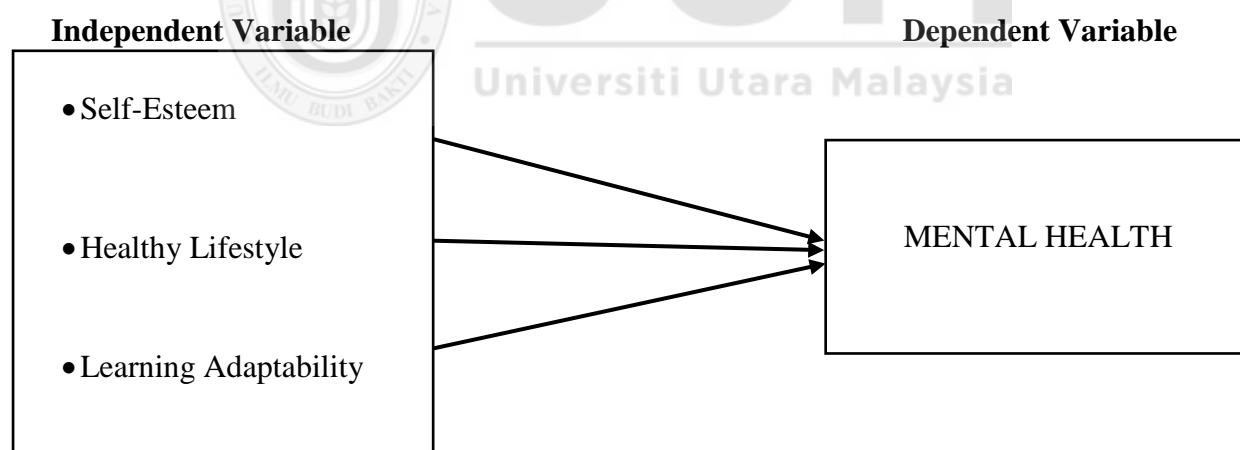


Figure 2.1 Research Framework

2.7 Hypothesis Development

2.7.1 Self-Esteem

Fortunately, in recent years, a growing number of researchers have started to incorporate additional aspects of self-esteem into their research and theories but still in limited number especially in Asian countries (United Nations Development Program, 2016). In this research,

the researcher had discussed the concept of self-esteem that influences the mental health of students in the university especially among postgraduate. In this popular culture like today when people have a life which extremely very fast as well as confronting pressure from different dimensions will give a huge impact on those who were having low self-esteem especially among university students. Individuals who have low self-esteem find that they have low value in their life or they think like they have not achieved much in their life (Robert, 2008). On the other hand, the view of an individual on his or her personality is a critical related factor to self-esteem and was appeared to effect on mental health directly. Therefore past studies have established the link between mental health problems would be raised when an individual's self-esteem is low (Robert, 2008).

Additionally, the majority of the people who have low self-esteem are more likely to feel sad, depressed and lonely. For decades, it realizes that self-esteem and depression are empirically related where people with low self-esteem are increasingly inclined to depression (Roberts & Monroe, 1999). Previous studies recommend that self-esteem is not only a correlate but also a vulnerability factor for depression due to depression can lead to severe personal consequences as a result toward health domains (Roberts and Monroe, 1999; Orth, Robins and Roberts, 2008; Zeigler-Hill, 2011).

On the other hand, as indicated by Uzma Irfan (2016) the impact of social values and variety in cultural make it unstable in assessing levels of self-esteem especially among university students. Ironically, the problem on the development of mental health, emotions, social like anxiety and depression are act as a critical role of having low self-esteem (Uzma Irfan, 2016). Above all, this type of conditions leads to having a high level of individual suffering on their mental condition. On the contrary, positive self-esteem acts as a defensive factor while low

self-esteem act as a risk factor. As a consequence, self-esteem affects both physical and mental of any individual. Therefore, mental health problems are decidedly connected with the factor of self-esteem (Restifo, Akse, Guzman, Benjamins and Dick, 2009; Schunk and Zimmerman, 2012). Nonetheless, there is yet a study on self-esteem in the context of Malaysian students. Therefore, the following hypothesis was posited.

H1: There is a positive and significant relationship between self-esteem and mental health.

2.7.2 Healthy Lifestyle

According to Dumuid (2017) expresses that lifestyle is a general word as it includes nearly everything an individual does throughout his or her daily life. In a few studies, the idea of lifestyle is limited to its negative side in which it demonstrates a few students' bad habits can give impact to their mental health. The previous study, have established the link between mental health and healthy lifestyle were uncovered that an indicator of lifestyle was connected positively with mental health outcomes (Latiffah Latiff et al., 2014).

As stipulated by the National Institute on Mental Health, healthy lifestyle activities lead to mental prosperity. With statistics appearing about in 25 individual have experience from mental illnesses for every year (Vantage Point, 2019). For instance like depression, bipolar or schizophrenia where it shows that it is the correct time to implement changes in a healthy lifestyle of all people especially for university students.

Therefore, the way of life changes does not need to be too extreme and drastic indeed even little changes can make a huge enhancement in mental health. Particularly, lifestyle habits positively significant to mental health condition regardless of whether positive or negative

(Vantage Point, 2019). For example, depression and anxiety are two regular side effects among individuals who are inactive or practising a bad habit of lifestyle.

There is a direct connection to individual mental health based on the way individual handle their stress condition. Thus, by choosing positive adapting tools prompts to better mental health. Necessarily, to have a good condition of mental health, so learning to cope with a healthy lifestyle is a vital process. In a case of lifestyle among university student, sleeping is a standout the most crucial things an individual can do it, to improve mental health but indeed there is such a large number having sleep deprived (Dumuid, 2017).

Harvard Health reports that, out of every single mental patient, more than 50% of them having sleeping problems while on a bigger scale having sleep disturbances. That is such a large number of individual attempting to function on too little rest. Thus, without legitimate rest, an individual will experience more difficulty in focusing and concentrating on their matters.

In recent decades, lifestyle has been perceived as an essential determinant of health status and has turned into the main point of research interest as a worldwide issue. Notably, people with depression frequently have more physically inactive. A previous study shows that the higher prevalence of unhealthy lifestyle was found in concurrent depressed people and followed by lifetime depressed (Dumuid, 2017). Mental health is impacted not only by general living conditions and major life events but yet likewise at the same time also by simple everyday behaviours or practices that can be adjusted by an individual. Thus, major lifestyle factors were shown to affect physical health and depression as a predictor of mental health.

H2: There is a positive and significant relationship between a healthy lifestyle and mental health.

2.7.3 Learning Adaptability

Subsequently, the capacity to adapt in various life circumstances have significantly connected with the individual's mental health if the learning adaptability does not go well with what those individual needs (Saleem Odeh, 2013). Learning adaptability is view as one of the vital issue specifically connected to human behaviour where is thus a response of an individual trying to accomplish harmonization of his thought processes and necessities of the environment at the different conditions (Jon, 2017).

In this area Saleem (2013), has directed a study intended to distinguish the sorts of adaptation problem facing by university students and the results demonstrated that the academic issues which show up as the form of academic loads and the commitment as the duty to study are one of a majoring issue in particular. This is the most vital issue that influences the adaptation of the students in a university. As featured by (Latiffah Latiff at el., 2014), the close connection between the academic and learning adaptation demonstrated a high critical relationship between the age of the students and their adaptation to life, as most of the younger students are more adaptable compared to older students. Hence, positive learning adaptation assumes an important role as an indicator to stay away from the high possibility of facing mental health due to stressful circumstances.

Students higher in adaptability and mental flexibility exhibit better mental health, motivation, performance and as well as reduced absence rates. Henceforth, studies propose that individuals with differences in adaptability play an important role which mental health provider adaptability may have an increment in term of commitment in their everyday errands (Green, Dishop and Aarons, 2016). In any case, it is obscure on how adaptability may operate within the context of a stressful environment. Respectively, these factors identify it relates to the

feeling of encountering multiple conflicting demands and having impossible amounts of work to accomplish.

H3: There is a positive and significant relationship between learning adaptability and mental health.

2.8 Chapter Summary

This chapter discussed the existing literature relevant and related to the topic studied. The chapter highlighted the relevant theoretical arguments that have evolved. The significance of the theories outlined in this chapter to this study was to explain the concept of self-esteem, a healthy lifestyle and learning adaptability. The next chapter describes the methods and instruments utilized in gathering data for the study.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter researcher has described the exact steps that had been undertaken in answering the research question of the present study. The objective was to give a complete description of the particular steps to be followed in conducting the tests. The subsections for this chapter include the research designs, population, study sample, sampling method employed, procedures of data collection, designs of a questionnaire, pre-test, the measurements of variable understudy, statistical technique and types of analysis of study are presented together.

3.2 Research Design

This was a non- experimental research which involves descriptive and hypotheses testing. There was no artificial setting created as it was a field study and it examined the level of self-esteem, healthy lifestyle and learning adaptability and its relationship to mental health among UUM postgraduate students. The present study was a cross-sectional study, and the unit of analysis was at an individual level focused on individual postgraduates' student mental health. A quantitative design was employed to get a clear-cut picture on overall study's aim in numerical aspects besides to acquire the reliability responses on study topic. Moreover, Ghauri, Grohaug and Kristianslund (1995) coined that quantitative approach enhances statistical analyses that assure the gathered data are reliable and valid. This leads to primary data collection (close-ended questionnaire developed). The questions had been responded within the five-point Likert Scale. Creswell (2003) acknowledged that questionnaire that been organized in multiple-choice (agreement scale) is to control the scope of the answer and ensure the validity and reliability of study without any unbiased error.

3.3 Population, Sample of Study and Sampling Method

3.3.1 Population

People, things or any solid objects were considered as a population where the sample was picked to measure. In any research or study, it is imperative to determine the target population preceding the sampling method as this helps to ensure that the data collected originated from an informed source that contributes to the research objectives. According to Sekaran and Bougie (2013) distinguishing the target population that the researcher wishes to investigate was one of the ways toward the process of sampling. So that, by recognizing the correct population is important to prevent invalid data and limit the generalization. In line with that, the population of this study were focused on postgraduate students enrolling in Othman Yeop Abdullah Graduate School of Business (OYA), University Utara Malaysia (UUM). Based on statistic received from OYA responsible authority, there are a total of 1139 postgraduate students in active status.

3.3.2 Sample Size and Sampling Technique

The determination of sample size plays an essential role in research because a sample that is too small might provide data that may not be necessarily represented. In any case on alternate sides, by illustrating super large sample also may lead to wasting time, resources and furthermore in term of financial. Despite, to be true it will not allow gaining reliable insights when the sample is too small, and the result will give effect to validity and reliability. Thus, the number of samples in this study was decided through Roscoe's rule of thumb (Table 3.1). Roscoe (1975) suggest there are few rules of thumb believed to be appropriate for most behavioural research, which states that a sample larger than 30 and less than 500 is appropriate for a most research study.

The researcher was given freedom to select any number within the range but to proceed with a recommendation, the sample size was selected within the limits which is recommended sample size is about 10% of parent population (Roscoe, 1975). Based on Roscoe's rule of thumb (Roscoe, 1975), at least 114 postgraduate students are needed to reflect whole study population, but researcher decides to distribute about 171 questionnaires which is increased to 15% from recommended above with intention to receive adequate response rate. As indicated by Sekaran and Bougie (2013) the determination of the quantity of appropriate elements taken from the population is called sampling which to study the element and to understand their characteristic will empower the generalization to the entire population.

Non-probability sampling design is applied to indicate that members were selected from the population in some non-random manner. This sampling technique was implied because there is no sampling frame was given to researcher from OYA, UUM yet only the updated total numbers of postgraduate students currently in active status were given due to confidential information. First and foremost, since the unit of analysis is individual level, the researcher applies convenience sampling as it involves collecting information from OYA postgraduate students who are conveniently available to provide the information.

Table 3.1
Determination of sample size

Roscoe's rule of thumb (10%):

(*SS = Sample Size; NP = Total number of populations in each universities*)

$$SS = NP \times 10 / 100$$

$$SS = 1139 \times 10/100 \quad SS = 114$$

3.4 Data Collection Procedure

Data collection procedure was handled with ethical considerations when a researcher dealing with OYA, UUM officer. Researcher includes data collection official letter which explained the objective of the study to gain the updated number of population or prospective respondents from the college. Later, the researcher identifies sample size through Roscoe rule of thumb. Data collection was administered using Google Form. Then, 171 OYA postgraduate students were invited to participate via online application (WhatsApp). The motive of internet survey was conducted due to cost and time constraint and it's believed will be efficient for the population larger than 300 (Uhlig, Seitz, Eter, Promesberger, & Busse, 2014). Respondents were given about a week to complete the survey and within the period, a gentle reminder was sent, besides with assurance of information collected will be strictly kept confidential and used only for academic purpose.

3.5 E-Survey Layout

An instrument used to collect data was solely from the e-questionnaire survey (Google Form). The questionnaire has five sections and each section was specified. Starts with welcoming respondent, demographic profile, self-esteem, healthy lifestyle, learning adaptability and mental health respectively. The objective and scope of the research were explained in brief to samples with assurance on confidentiality and anonymity. The scale applied to tap all responses for variables were five-point Likert scale ranging from 1 to 5 and labelled as "1" (Strongly Disagree), "2" (Disagree), "3" (Neutral), "4" (Agree), and "5" (Strongly Agree).

3.6 Goodness of Measurement

Researcher in need to ensure that instruments used in the study are indeed measuring constructs as what they intended to measure. Thus, the goodness of measurement, validity and reliability

were performed in ensuring the righteousness of measurements. Validity is a test on ‘how’ well established or developed an instrument measuring the construct as intended, while reliability is a test on ‘how’ internally consistent on each item in the instruments that measure the concept itself, (Sekaran & Bougie, 2010). In the present study, face validity is performed through pre-test prior to the actual study, and reliability analysis was conducted for the actual study.

3.6.1 Pre-Test

A pre-test was conducted in this study before distributing questionnaires to actual respondents. The aim was to ensure that respondents clearly understand the entire content of questionnaire and clarity on wordings. It clarified the face validity and content validity. Expertise in this area were involved in this pre-test which are a psychiatrist and senior lecturer at Universiti Putra Malaysia and also counsellor at community health centers. The experts were going through the entire survey by themselves and rate the items on a Likert scale. The idea is to get their judgement on how well each questionnaire items truly reflects the study. The results from pre-test disclosed that all items in this questionnaire are clear, transparent and straightforward. Thus, no amendments were made from the adapted items. The finalized questionnaire attached (Refer Appendix A).

3.6.2 Reliability Analysis

Reliability analysis was used to test the internal consistency among items by using Cronbach’s coefficient alpha. The Cronbach alpha value for adapted items was declared in measurements below. In this study, level of reliability was referred to Hinton, Brownlow, McMurray and

Cozens (2011), that considered internal consistent as following alpha value, 0.50 and below (low reliability), 0.50 to 0.70 (moderate reliability), 0.70 to 0.90 (high reliability) and 0.90 and above (excellent reliability).

3.7 Measurement

3.7.1 Mental Health Measures

Mental health was treated as a dependent variable in this study and has been operationalized as an individual's capacity to adapt with and change in accordance to the recurrent stresses of everyday living (Goldberg, 1978). Mental illness results from a failure to adapt to an overwhelming circumstance. The named variable is measured by the General Health Questionnaire English-Malay version (GHQ) 12-items which was developed by Goldberg (1997). Table 3.2 shows the measures of mental health. The range of measure is from “1” (Strongly Disagree) to “5” (Strongly Agree). Cronbach alpha value for mental health is 0.852 (Goldberg, 1997).

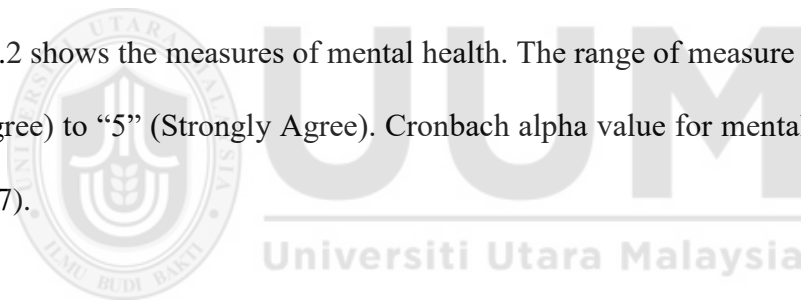


Table 3.2
Measures of Mental Health

Variable	Operational Definition	Items
Mental Health	Mental health is an individual's capacity to adapt with and change in accordance to the recurrent stresses of everyday living (Goldberg, 1978). Mental illness results from a failure to adapt with an overwhelming circumstance.	<ol style="list-style-type: none"> 1. I loss much sleep over worry. 2. I felt constantly under stress. 3. I am able to concentrate on what I am doing. 4. I felt that I am playing useful part in many things. 5. I am able to face up my problem. 6. I felt capable of making decisions. 7. I felt that I could not overcome my difficulties. 8. I felt reasonably happy on things considered. 9. I am able to enjoy my normal day to day activities. 10. I been feeling unhappy/depressed. 11. I have been losing confidence in myself. 12. I have been thinking of myself as a worthless person.

Source: Goldberg (1978)

3.7.2 Self-Esteem Measures

Self-esteem is a general assessment of one's value or esteem whether in a positive or negative toward oneself. Self-esteem is a component of self-concept which Rosenberg (1965) characterizes as " totality of the person's thought and emotions with reference to himself or herself as an object. Therefore, besides self-esteem, self-efficacy and self-personalities are a critical piece of self-concept. The named variables are measures by Rosenberg Self-Esteem Scale (RSES) 12-items which developed by Rosenberg (1965). Table 3.3 shows the measures of mental health. The range of measure is from "1" (Strongly Disagree) to "5" (Strongly Agree). Cronbach alpha value for self-esteem is 0.770 (Rosenberg, 1965).



Table 3.3
Measures of Self-Esteem

Variable	Operational Definition	Items
Self-Esteem	Self-esteem is a general assessment of one's value or esteem whether in a positive or negative toward oneself. Self-esteem is a component of self-concept which Rosenberg (1965) characterizes as " totality of the person's thought and emotions with reference to himself or herself as an object. Therefore, besides self-esteem, self-efficacy and self-personalities are a critical piece of self-concept.	<ol style="list-style-type: none"> 1. Overall, I am satisfied with myself. 2. At times I think I am not good at all. 3. I am able to do things as well as most other people do. 4. I feel I do not have much to be proud of. 5. I certainly feel useless at times. 6. I feel that I am a person of worth, at least on an equal plane with others. 7. All in all, I am inclined to feel that I am a failure. 8. I have periods in which I feel devastated and/or depressed. 9. I frequently compare myself to others. 10. I find it difficult to hear criticism about myself. 11. I tend to think negatively much of the time. 12. I fear making a mistake which others might see.

Source: Rosenberg (1965)

3.7.3 Healthy Lifestyle Measures

Healthy lifestyle reflects an enabled individual on capable of controlling stress and settling on decisions (Darviri, 2014). However, environmental health related lifestyle factors have been widely examined on dietary habits, substance abuse, physical exercise and sleeping quality.

The named variable is measures by Healthy Lifestyle and Personal Control Questionnaire (HLPCQ) 9-items which developed by (Darviri et al., 2014). Table 3.4 shows the measures of mental health. The range of measure is from “1” (Strongly Disagree) to “5” (Strongly Agree). Cronbach alpha value for healthy lifestyle is 0.880 (Darviri, 2014).



Table 3.4
Measures of Healthy Lifestyle

Variable	Operational Definition	Items
Healthy Lifestyle	Healthy lifestyle reflects an enabled individual on capable of controlling stress and settling on decisions (Darviri, 2014). However, environmental health related lifestyle factors have been widely examined on dietary habits, substance abuse, physical exercise and sleeping quality.	<ol style="list-style-type: none"> 1. I always taking care of my lifestyle. 2. I always discuss my problems and concerns with people close to me. 3. I always get enough sleep. 4. Feel I am growing and changing in positive ways. 5. I always accept those things in my life which I cannot change. 6. I have my own specific methods to control my stress. 7. I am able to balance my time between study and personal matters. 8. I believe students' mental health problem is affected by their lifestyle. 9. I am facing difficulties in getting rid of some of my bad habits.

Source: Darviri (2014)

3.7.4 Learning Adaptability Measures

Learning adaptability as treated as independent variable in this study and has been operationalized as adjust to changes by learning the environment and also behavior (Midgley, 2000). Individual who are effectively adjusts to change in social or work environment was considered positively have learning adaptability. The named variable is measures by Patterns of Adaptive Learning Scales (PALS) 7-items which developed by Midgley (2000). Table 3.5 shows the measures of mental health. The range of measure is from “1” (Strongly Disagree) to “5” (Strongly Agree). Cronbach alpha value for learning adaptability is 0.670(Midgley, 2000).



Table 3.5
Measures of Learning Adaptability

Variable	Operational Definition	Items
Learning Adaptability	Learning adaptability is about able to adjust to changes by learning the environment and also behaviour (Midgley, 2000). Individual who are effectively adjusts to change in social or work environment was considered positively have learning adaptability.	<ol style="list-style-type: none"> 1. I am able to work effectively with others. 2. I have difficulties in understanding people of other racial and ethnic backgrounds. 3. I am able to learn effectively on my own. 4. When the material is too difficult, I only study the easy parts or give up. 5. I can force myself to keep working on it until I finish it. 6. I feel comfortable interacting with people of different race/ethnicity. 7. I feel comfortable finding my way around campus and the community.

Source: Midgley (2000)

3.8 Operational Definition

Table 3.6

Operational Definition of Mental Health, Self-Esteem, Healthy Lifestyle and Learning Adaptability

TERMS	AUTHOR/SCHOLAR
<p>Mental Health</p> <p>Mental health is an individual's capacity to adapt with and change in accordance to the recurrent stresses of everyday living (Goldberg, 1978). Mental illness results from a failure to adapt with an overwhelming circumstance.</p>	(Goldberg, 1978)
<p>Self-Esteem</p> <p>Self-esteem is a general assessment of one's value or esteem whether in a positive or negative toward oneself. Self-esteem is a component of self-concept which Rosenberg (1965) characterizes as "totality of the person's thought and emotions with reference to himself or herself as an object. Therefore, besides self-esteem, self-efficacy and self-personalities are a critical piece of self-concept.</p>	(Rosenberg, 1965)
<p>Healthy Lifestyle</p> <p>Healthy lifestyle reflects an enabled individual on capable of controlling stress and settling on decisions (Darviri, 2014). However, environmental health related lifestyle factors have been widely examined on dietary</p>	(Darviri et al., 2014)

habits, substance abuse, physical exercise and sleeping quality.	
Learning Adaptability Learning adaptability is about able to adjust to changes by learning the environment and also behaviour (Midgley, 2000). Individual who are effectively adjusts to change in social or work environment was considered positively have learning adaptability.	(Midgley, 2000).

3.9 Statistical Design and Analysis

The results gathered from data collected were coded by using Statistical Package for Social Science (SPSS) version 25.0. There are three statistical techniques were applied in this study in accord to descriptive and inferential statistics namely, frequency, descriptive, normality, linearity, correlation and multiple linear regression analyses. Frequency analysis used to describe demographic distribution by classification of samples involved. To determine central tendency and dispersion of items, mean and standard deviation analyses were executed in descriptive analysis. Besides that, the minimum and maximum value also included in this analysis to identify in general if there are any outliers. Normality test is undertaken to ensure no violation on three basic assumptions namely normality, linearity and homoscedasticity (Pallant, 2007). Skewness and kurtosis ratios were used to assess the significance values for normality diagram beside to look at whether the items have any outliers that falls outside the data sets. Together with linearity diagram that will reveal if the data are consistent with the straight line. Next, a reliability analysis was performed solely for actual study as pre-test was conducted prior to the actual study. In addition, inferential statistics is intended to examine the significant values in contributing to the relationship between two or more variables studied.

Pearson correlation analysis was applied to examine the direction (positive or negative) and strength (weak, moderate or strong) of associations between variables. Finally, multiple linear regression was applied to indicate the relative contribution of independent variables to predict the dependent variable and to test hypotheses formulated in the present study.

3.10 Conclusion

This chapter spotlight methodology approaches being executed in this study. This includes the research design, population, sample of study and sampling method, operationalization of variables, the data collection procedure, questionnaire layout, pre-test and together with analyses techniques. The analyses were performed to determine ‘how’ much the predictors affects (beta) criterion and ‘how’ much the self-esteem, healthy lifestyle and learning adaptability were explaining the variance (R square) of mental health (Pallant, 2007; Sekaran & Bougie, 2010). In a nutshell, the chapter gives a better indication of the research methodology adopted and the pattern of analysis embraced.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 Introduction

The results presented in this chapter is through a statistical finding that prompted to further discussion and conclusion for the current study in the next chapter. The results were gotten by using statistical techniques, descriptive and inferential statistics. Here, descriptive statistics focus on sample demographic distribution, central tendency and dispersion of variables, while inferential statistics focused on potential correlation and effects among the variables. The analyses commence with a review of e-survey research response rate, frequency, mean and standard deviation, reliability, normality, correlation and multiple regression.

4.2 Response Rate

In perspective of data collection which was directed by the online base (Google Form) were conveyed to 171 postgraduate students via online application (WhatsApp). Additionally, a notice of delicate update as a gentle reminder was sent following seven days with the goal to increase the response rate. Nonetheless, a total of 124 (72.51%) respondents completed successfully. In spite of the fact that the researcher added up the quantity number of respondents to 15% in the event of low response rate, thus the minimum prerequisite 114 respondents met. Therefore the “acceptable” response rate was disclosed in Lindemann (2018) blog for electronic or online survey is about 29% which is being considered as acceptable. Moreover, as stipulated by Fan and Yan (2010) features that mostly online survey is about 11% low rate contrasted to other survey types.

4.3 Descriptive Statistics

4.3.1 Participants' Demographic Distribution

This section portrays the respondents' background that participated in this study. In particular, the respondent's demographic information like gender, age, marital status and presence of children. The details were distinguished by utilizing frequency analysis in frequency statistics. Frequency is essential as it is simplifying the data and able to obtain values for each classification (Sekaran & Bougie, 2010). Table 4.1 shows the demographic data of sample participated (n=124). The analysis output is attached (refer Appendix B).

Table 4.1
Output of Respondents' Profile

Demographic	Frequency	Percentage (%)
Gender		
Male	36	29.0
Female	88	71.0
Age		
20 – 25	74	59.7
26 - 35	49	39.5
36 – 45	1	0.08
46 and above	0	0
Marital Status		
Single	114	91.9
Married	10	8.1
Divorced / Widowed	0	0
Children		
Yes	6	95.2
No	118	4.8

As shown in the above table, among 124 respondents, 88 (71%) is female and the remaining 36 (29%) is male. It indicated that the biggest portion of the survey was participated by female students. In term of respondents' age 74 (59.7%) respondents were in the age range of 20 to 25 years old, followed by 49 (39.5%) respondents were in the age range of 26 to 35 years old while for age range between 36 to 45 years old only have 1 (0.08%) respondents.

With regards to respondents' marital status, 10 (8.1%) already married and the remaining respondents on 114 (91.9%) still single. Continue with the number of children to the respondents who already married it shown that only 6 (4.8%) have children and the rest 118 (95.2%) respondents still single and does not have any children.

4.3.2 Central Tendency and Dispersion of Variables

The main point of mean and standard deviation in descriptive statistics used to recognize the 'central' scores of variables and spread the values approximately at central tendency. It is crucial as the value of mean and standard deviation will feature the significance of the construct being assessed (Martey, 2014). As been refer to analysis, negative items in mental health were reverse coded to guarantee that all items were align in one positive direction, alongside after the process of deleting unreliable items. According by Pallant (2007), to guarantee the high intensity of optimism, five-point Likert Scale that used in research survey need to be in line. Furthermore, the minimum and maximum value were added to recognize if there are any outliers from the scale.

Table 4.2
Output of Mean and Standard Deviation for Variables

Variables	Min	Max	Mean	SD
Mental Health (MH)	3.00	4.00	3.34	0.32
Self-Esteem (SE)	2.00	4.00	3.25	0.43
Healthy Lifestyle (HL)	2.00	5.00	3.51	0.40
Learning Adaptability (LA)	3.00	5.00	3.49	0.41

a. N = 124

b. Dependent Variable: MH= Mental Health

c. Independent Variables: SE=self-esteem, HL=healthy lifestyle, LA=learning adaptability

Table 4.2 above were indicating the mean and standard deviation score for variables for this study. Basically, almost of all mean score are above moderate on five-point Likert Scale but for self-esteem it shows slightly moderate. In spite of the fact, the minimum and maximum value indicating that there is no any outliers fall out of the five-point Likert Scale.

4.4 Reliability Analysis

In order for showing the goodness of measures, reliability analysis is particularly considered as an essential process (Sekaran & Bougie, 2010). The reliability level for variables on this study was identified based on the suggestion made by Hinton, et al., (2004). The authors uncovered that, 0.50 and below (low reliability), 0.50 to 0.70 (moderate reliability), 0.70 to 0.90 (high reliability) and 0.90 and above (excellent reliability). After the reliability analysis, found there are few items need to be deleted as prescribed by the analysis itself to increase the reliability value.

The variables for self-esteem and healthy lifestyle indicates a high level of reliability, but on the variable of learning adaptability was shown only a moderate level of reliability (refer Table

4.3). It possibly due to misinterpretation or lack of understanding. As indicated by Mohan and Mullan (2013) lack of understanding and misinterpretation on items may give impact as a result of low alpha value. In fact, with the different perception among respondents especially in the context of a country between Malaysia and Western particularly might tend this type of problem occur and give a low result on alpha value.

Table 4.3

Output of Reliability Analysis: Cronbach's Coefficient Alpha

Constructs	No. of Items	No. of Items Discarded	Cronbach's Alpha	Level of Reliability
MH	11	1	.541	Moderate
SE	12	0	.703	High
HL	9	0	.717	High
LA	7	0	.505	Moderate

4.5 Normality, Linearity and Homoscedasticity

The main focus on the preliminary test as to accomplish the substantial distribution of variables for further inferential statistics like Pearson correlation and multiple linear regression analyses. Specifically, and indicated by Pallant (2007) the purpose of this test is to guarantee that there is no violation on three basic assumptions which are normality, linearity and homoscedasticity. While the purpose of the Skewness and Kurtosis are act as an indicator to evaluate the normality significance values. As indicated by Georg and Mallery (2010), there is a rule to ensure normality, as skewness and kurtosis value between -2 to +2 are considered acceptable to prove the normal univariate distribution. Here, Table 4.4 shows the normality of distribution for this study, demonstrates the values are within an acceptable range even data shows a little skewed and kurtotic for all the variables yet does not contrast significantly from normality.

Next, discuss the linearity part. Again, the main purpose of linearity is to ensure a linear relationship between predictors and the outcome variable. The standard guideline is that the variables must have a similar variance to the line instead of inconsistent and homoscedasticity. Accordingly, to evaluate the linearity and homoscedasticity between variables, normal probability plot was performed. The visual inspection of normal P-P Plot and histogram with bell curve showed in Figure 4.1 and Figure 4.2. It indicates that the data scored were approximately normally distributed and it substantially skewed as all variables are below -2. Henceforth, there is no major deviation found in normal probability plot as observed in shown figures and in this manner it met the prerequisite of basic assumption and it enables to proceed into inferential statistics to testify the research objective.

Table 4.4
Normality Analysis: Skewness and Kurtosis Ratios

Constructs	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
MHnew	0.101	0.217	0.809	0.431
SE	-0.070	0.217	-0.354	0.431
HL	-0.016	0.217	0.940	0.431
LA	0.467	0.217	0.787	0.431

a. N= 124

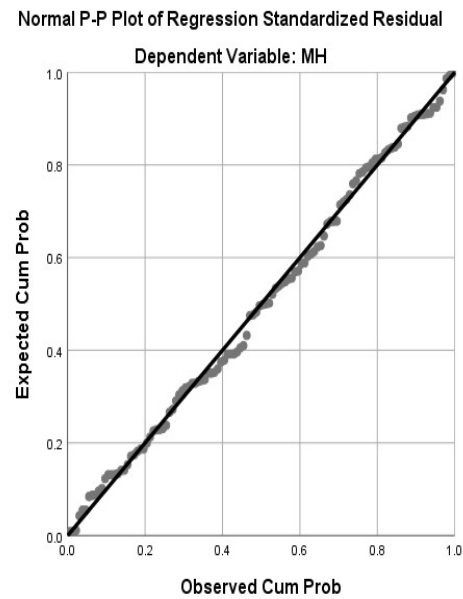


Figure 4.1
Normal P-Plot of Regression Standardised Residual

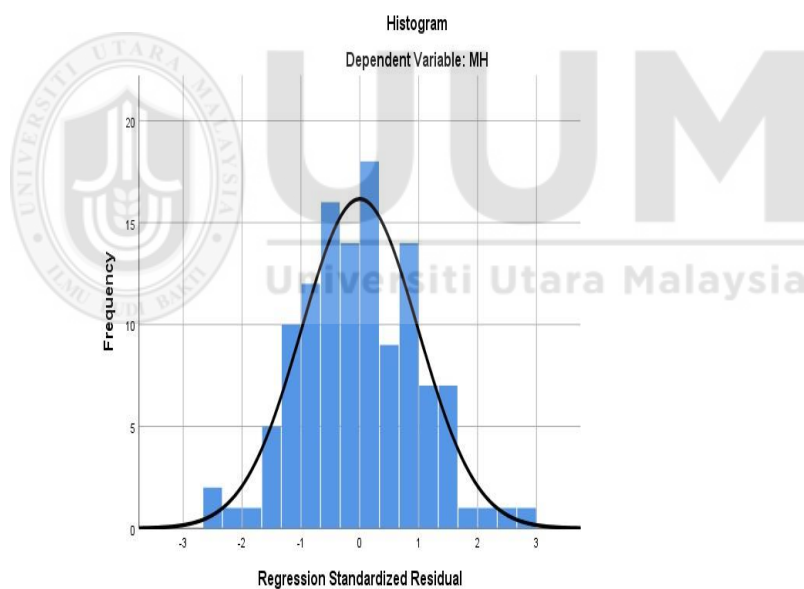


Figure 4.2
Statistics Histogram for Self-Esteem, Healthy Lifestyle, Learning Adaptability and Mental Health

4.6 Inferential Statistics

4.6.1 Pearson Correlation Analysis

Correlation analysis can be said as predominant which is through that it can investigate the potential relationship between the continuous variables. The analysis gives the indication of a variable's direction either substantially negative or positive. The researcher needs to identify the coefficient and associated significance value (p) first, in order to interpret the correlation coefficient (Coakes & Steed, 2007).

Along these lines, if the correlation coefficient demonstrates +1.0, it shows that as an ideal positive correlation between two variables, meanwhile if the results is -1.0, it explains as perfect negative correlation, (Gliner, Morgan & Leech, 2009). So that, the acceptable significant value (p) will be either 0.01 or 0.05 (Coakes & Steed, 2007). Additionally, there has suggestion stipulated by Cohen (1988) on the interpretation of r value, the strength of correlation coefficient which is the r value of 0.10 to 0.29 (weak), 0.30 to 0.49 (moderate) and 0.50 to 1.00 (strong). Meanwhile, Pallant (2007) clarified if the value scored zero (0), it referred as no correlation. Table 4.5 shows the output of Pearson correlation analysis.

Table 4.5
Output of Pearson Correlation Analysis

	MH_new	SE	HL	LA
MH_new	1			
SE	0.079	1		
HL	0.184*	0.191*	1	
LA	0.118	0.140	0.422**	1

a. $N=124$

b. **Correlation is significant at the 0.01 level (2-tailed)

c. *Correlation is significant at the 0.05 level (2-tailed)

Based on result presented above in Table 4.5 with 124 samples tested on, all variables (SE, HL and LA) related to dependent variable (mental health) shows weak correlation ($r = 0.079$, $p > 0.05$; $r = 0.184$, $p < 0.05$ and $r = 0.118$, $p > 0.05$). However only LA variables showing moderately correlated to HL. Additionally, there is only a variable were significantly related to dependent variable, namely Healthy Lifestyle with ($r = 0.184$, $p < 0.05$).

4.6.2 Multiple Linear Regression Analysis

Multiple linear regression analysis is the extension of correlation analysis, particularly useful in finding ‘how’ much the contribution does independent variables impact dependent variables and also want to test the formulated hypotheses. This analysis was performed to examine the relationship between self-esteem, healthy lifestyle and learning adaptability on mental health and with the hypotheses developed for these variables. Tables below shows results derived from analysis, Table 4.6 analysis output and Table 4.7 is hypotheses results.

Table 4.6
Output of Multiple Linear Regression Analysis

	Standardized Coefficients	t	Sig.
	Beta		
(Constant)		6.895	.000
SE	0.042	0.448	.655
HL	0.182	1.798	.075
LA	0.030	0.299	.765
R Square (R²)	0.043		
Adjusted R Square	0.019		

F Value 1.752

Sig. F Change 0.160b

a. $N = 124$

b. *Dependent Variable: MH*

c. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 4.6 above shows the predictors that include the independent variables are 4.3% of the dependent variable that is mental health whereas 95.7% was demonstrated by other researches. It explains the variance in the dependent variable, mental health. Overall the results indicate that self-esteem ($\beta = 0.042$, $p > 0.05$), healthy lifestyle ($\beta = 0.182$, $p > 0.05$), and learning adaptability ($\beta = 0.030$, $p > 0.05$) were found that not significant in predicting mental health. Thus, H1, H2 and H3 was rejected due to the insignificance (refer Table 4.7)

4.7 Hypotheses Testing

Table 4.7

Summary of Hypotheses Results using Standard Multiple Linear Regression Analysis

Hypotheses	Description	Results
H1	There is a significant relationship between self-esteem and mental health.	Rejected
H2	There is a significant relationship between a healthy lifestyle and mental health.	Rejected
H3	There is a significant relationship between learning adaptability and mental health.	Rejected

4.8 Chapter Summary

Based on the discussion above, three research objectives have been accomplished via hypothesis testing. There was a clear indication that all independent variables were not related to the dependent variable. In other words self-esteem, healthy lifestyle and learning adaptability are not significant to predict mental health in this study's context. An output of the statistical analyses were attached (Appendix B).



CHAPTER FIVE

DISCUSSION, RECOMMENDATION AND CONCLUSION

5.1 Introduction

This chapter represents the summary of findings, some limitations have been identified and future direction of research, research implication, theoretical implication, practitioner and conclusion based on the data analyzed in the previous chapter.

5.2 Summary of Finding

The focus of this study was to determine the influence of self-esteem, a healthy lifestyle and learning adaptability on mental health among postgraduate students. This study also aspires to achieve three objectives which were to examine the influence of self-esteem on mental health, to examine the influence of healthy lifestyle on mental health, and to examine the influence of learning adaptability on mental health. Next, this study comes out with three hypotheses based on the literature review. Based on this study, the populations were postgraduate students enrolling in Othman Yeop Abdullah Graduate School of Business (OYA), (UUM). The statistic received from OYA responsible authority, there were a total of 1139 postgraduate students in active status and 171 students were chosen as a sample for this study. Nonetheless, only a total of 124 respondents completed successfully. The results revealed that SE, HL and LA did not influence the mental health of postgraduate students in UUM.

5.3 Relationship between Self-Esteem and Mental Health

Result in Table 4.5 and Table 4.6 show that there was a positive relationship between SE with mental health but it does not influence the mental health of postgraduate especially in OYA school of UUM. Thus, in the simple way it brings the meaning of self-esteem have a

relationship with mental health but it does not influence mental health among postgraduate students in UUM. The result turns into insignificant could be because of the response rate that obtained during this study.

Therefore, as supported by Rutter (1992), a high level of self-esteem together with a strong social support makes an individual less vulnerable against mental health problem. So that the solid reason why the result turns into insignificant could be because of a high level of self-esteem among the students which can maintain their ability to control their emotions in the positive ways no matter how hard the situation they faced in their life.

The insignificant relationship between self-esteem and mental health of students were also supported by Longmore, Manning, Giordano and Rudolph (2004). They argued that even though self-esteem considered as a led factor for mental health issues however, positive circumstances can occur toward each individual which self-esteem can impact behaviour since individuals adopt or change their behaviours to maintain or boost up their self-esteem. Therefore, students only have a high potential for mental health if they do not change their behaviour.

Based on past studies have established the link between mental health problems would be raised when an individual's self-esteem is low (Robert, 2008). This study was conducted in the Western context and been carries out in all university as a whole. Meanwhile, based on this study, it was only focused and conducted in UUM and the scope been specialized to OYA school. Therefore, with the difference in term of an environment, culture and knowledge may cause differences and variations in the results.

On top of that, mental health is still “new” in the Malaysian environment where the awareness and knowledge among each individual are still found at a low level. Therefore, more efforts need to be done by the Malaysian government and university management to create better awareness of self-esteem and mental health among university students. Along with this line, university management should come out with the program like mental health promotion to make all students have a high awareness about their condition of mental health as well as to enhance their performance and ability to function well in a long time.

5.4 Relationship between Health Lifestyle and Mental Health

Based on the result, there was a positive relationship between HL and mental health but however, it does not influence the mental health of postgraduate students in UUM. Particularly, HL activities lead to mental prosperity where lifestyle habits have positive significant to mental health condition regardless of a positive or negative way. The insignificant result could be based on the positive way of lifestyle that been practice by the postgraduate students. For instance, most of the colleagues always encourage each other to exercise a healthy lifestyle especially during their study period in university life. This is supported by Jacka (2015), mentioned that by developing effective and best practice strategies as a prevention approach can contribute to reduce common mental health problems and this automatically reflect back what happens toward UUM’s postgraduate where most of them might have their own effective approach and strategies in order to control their mental condition from boost out in a negative way. In fact, this particularly shown why a healthy lifestyle do not influence their mental health conditions.

As stipulated by (Velten, Bieda, Scholten, Wannemuller and Margraf, 2018) lifestyle can positively effect on symptoms of depression, anxiety and life satisfaction as a condition of

mental health problem, but in this study the result found been a contrast from what the author said. Probably, the reason for the result could be because students are able to manage well their lifestyle according to the positive healthy ways.

On top of that, university management should carry out with more prominent awareness of lifestyle factors which offers major preferences especially among university students. With this in mind, lifestyle factors can be powerful in determining mental and physical health. Indeed, even the individual who does not have a mental condition may in any case should also be searching for an approach to additionally improve their mood, diminish pressure and deal with their everyday mental health. As has been noted, positive life changes can be engaged, for instance, an individual need to have the ability to roll out with little meaningful improvements in managing their lifestyle.

5.5 Relationship between Learning Adaptability and Mental Health

Based on the result, LA did not influence the mental health of postgraduate students. Therefore, the insignificant result could be because of a high level of learning adaptability by the students which they enable to suit themselves with their surroundings and make it comfortable for any occasion they faced. As stipulated by Saleem (2013), adaptation refers to the individual arrangement between reality, thoughts and the inside culture that might come from different ideology. Thus, afterwards in this study show that students are able and attempt to make an adjustment to accomplish that sort of harmony between themselves and the surrounding environment especially in a stressful university environment.

According by Collie, Holliman and Martin (2016), the current study focuses on one additional approach that may help to reveal further insight into this critical issue which is on students'

adaptability. It involves exploring a very different learning environment, a change in social networks and increase in personal autonomy and responsibility but based on the result received from this study all this element have easily been adopted by most of the students so they will not be contributed to the mental health issue.

As supported by Jambroes, Nederland, Kaljouw, Vliet, Essink-Bot and Ruwaard (2015), learning adaptability can be adopted or should be adapted to various cultural and social conditions or on local settings as a prerequisite to being healthy. However, few groups may be unable to fulfil this type of prerequisites due to each individual vary in term of their ability to adopt and adapt, thus this might give a high possibility to gain mental health problem (Jambroes et al., 2015). On top of that, it means that postgraduate students from OYA's school have a high level of learning adaptability and due to that they are less vulnerable and also prevented them from mental health problem during their university year as a result of insignificant of this study.

5.6 Limitation and Future Direction of Research

This study was aimed to investigate factors influencing the mental health of postgraduate students. Furthermore, the objective was to investigate the relationship between self-esteem, healthy lifestyle and learning adaptability among the postgraduate students, UUM.

This study had some limitation where the limitation was restricted to OYA postgraduate students and excluded PhD students. The reason why only the postgraduate students from OYA were picked as they were easier to be approached closer as the researcher also originates from OYA school as well, so a higher response rate was expected. However, the researcher could not be sure that the majority of the respondents were free from mental health because only 124

respondents were surveyed in this study. Besides that, other universities in another state may contribute to a different result from this study.

Three independent factors that were SE, HL and LA in this study may not describe the whole explanation to understand the influence of mental health among university students particularly for UUM postgraduate students. Hence, the other factors that have higher possibility contribute to the higher impact of mental health among university students such as economic and financial pressure, culture shock, parental pressure could be taken into consideration as a future study related to mental health. Due to that, a future study was recommended and expected to propose a basic and rapid procedure to positively perceive the major factor of mental health among university students.

5.7 Research Implication

The result of the investigations in this study was concluded and the discussion on the results of mental health among postgraduate students has been presented. Furthermore, the explanation on the implication of the study conducted on all respondents involved. In spite of that, with this explanation the involved respondents can take an action and make an effort to control the level of mental health in order to maintain it at the ideal level.

5.7.1 Theoretical Implication

This study was able to examine factors influencing mental health from SCT. Besides that, this study also contributed to the research field of self-esteem, a healthy lifestyle and learning adaptability particularly in local universities in Malaysia. However, through this study, the result represented that none of the variables influences the mental health of postgraduate students in OYA, UUM. Bandura (1997) indicated, SCT assessing behavioural changes rely on

the elements of the environment, people and behaviour. It gave a contribution to the literature in terms of the influence of self-esteem, healthy lifestyle and learning adaptability on mental health among university students and contributed to better understanding of relationship on all those variables especially in a Malaysian context.

SCT indicates a major set of determinants and an ideal method for making an interpretation into powerful health practices. SCT describes self-esteem as an individual's including the elements of self-worth, self-respect and self-acceptance and able to link with this study's main idea. Next on the element of environment refers to the variables that can influence an individual's behaviour especially toward their mental health which is in this study focus on a healthy lifestyle. Along with this line, the social component was applied as this declare that university students should have a positive relationship with learning adaptability as for them to feel safe and comfortable with the current surrounding. As a result, SCT has explained the relationship between self-esteem, healthy lifestyle, learning adaptability and mental health.

5.7.2 Practical Implication

According to the result of the findings, it can help most of the students to understand factors that influence mental health of postgraduate students. Thus, the results uncovered that SE, HL and LA did not influence the mental health of postgraduate students especially students from OYA schools. Therefore, university management can use this study as a guideline for them to increase the level of awareness on mental health problems among university students particularly in UUM.

Furthermore, this study also can able to give a better understanding to the Ministry of Education and together with Ministry of Health in reducing mental health issue among Malaysian students

to have a better future. In the same way, in reducing mental health issue university management and the government should play a major role to make it effective likewise developing characteristic of resilience through students well-being activities and also can focusing on health promotion with a few campaign, events or special projects such as Malaysian Campus 'happiness project'. Importantly, the government also must play a more prominent role in engagement with media on correcting misinformation about mental health.

5.8 Conclusion

In a nutshell, this study proposed various components that can influence the mental health of postgraduate students. Furthermore, this study found that the prevalence of self-esteem, healthy lifestyle and learning adaptability does not influence the mental health of postgraduate students in UUM. Consequently, the outcome and result from this study may help the other researchers to design and to build up another component that might influence mental health problems among students. Finally, improving knowledge and strategies in controlling these problems among students may positively help to increase their academic achievement as well as general performance in their lives.

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APPENDICES

Appendix A Questionnaire



I am **Nur Arif Syazana Binti Md Zabidi** student from Othman Yeop Abdullah Graduate School of Business is currently conducting research on **The Influence of Self-Esteem, Healthy Lifestyle and Learning Adaptability on the Mental Health among Postgraduate Students in University Utara Malaysia (UUM).**

I would be grateful if you would answer the question sincerely. All the answer is merely your opinion. The answer are particularly will be kept strictly confidential and for internal study only. The questionnaire is divided into three parts which are Part A, Part B and Part C.

I would appreciate your cooperation to correctly answer the questionnaire so that results can be fully beneficial. All information is confidential.

Thank you for your cooperation.

Nur Arif Syazana Binti Md Zabidi

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SECTION A Respondent Demographic

This part contains a few demographic information pertaining to yourself. Please tick (✓) the appropriate responses for all questions or write your response in the space provided.

1) Gender :

- ☐ Male
- ☐ Female

2) Age / :

- ☐ 20-25 years old
- ☐ 26-35 years old
- ☐ 36-45 years old
- ☐ 46 and above

3) Marital Status

- ☐ Single
- ☐ Married
- ☐ Divorced /Widowed

4) Do you have any children? :

- ☐ Yes
- ☐ No

5) Have you ever been diagnosed with a mental illness? :

- ☐ Yes
- ☐ No

6) Has a family member of friend of yours ever been diagnosed with a mental illness? :

- ☐ Yes
- ☐ No

<div>+</div> SECTION B : INSTRUCTION: Please indicate the level of agreement to the following statement by circling the appropriate number in the scale given.						
No. Bil.		<i>Not at all knowledgeable</i>	<i>Not very knowledgeable</i>	<i>Somewhat knowledgeable</i>	<i>Knowledgeable</i>	<i>Very knowledgeable</i>
	General Knowledge about Mental Illness and Health					
1.	How knowledgeable do you consider yourself to be about mental illness overall?	1	2	3	4	5
No. Bil.		<i>Not at all confident</i>	<i>Not very confident</i>	<i>Somewhat confident</i>	<i>Confident</i>	<i>Very confident</i>
2.	How confident are you in your overall knowledge of mental illness?	1	2	3	4	5

3) Can a person be born with a mental illness? :

- () Yes
() No

4) Where do you think mentally ill people should be treated?:

- () By the community
() Special homes/
() Hospital
() At home
() By a general practitioner

Please **RANK** all of the following 12 items by placing number from 1 to 12 by each item where (1 – being the **MOST** likely to cause mental health among postgraduate students) and (12 – being the **LEAST** likely to cause mental health problem among postgraduate students)

5) What causes mental health problem? :

- () Depression
() Stress
() Over workload
() Financial problem
() Family/relationship problems
() Death or loss
() Low self-esteem
() Living style
() Academic factors
() Learning adaptability
() Poor time management
() Poor work life balance

SECTION C :						
INSTRUCTION: Please indicate the level of agreement to the following statement by circling the appropriate number in the scale given.						
No. Bil.		Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
	Self-Esteem					
1.	Overall, I am satisfied with myself.	1	2	3	4	5
2.	At times I think I am not good at all.	1	2	3	4	5
3.	I am able to do things as well as most other people do.	1	2	3	4	5
4.	I feel I do not have much to be proud of.	1	2	3	4	5
5.	I certainly feel useless at times.	1	2	3	4	5
6.	I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4	5
7.	All in all, I am inclined to feel that I am a failure.	1	2	3	4	5
8.	I have periods in which I feel devastated and/or depressed.	1	2	3	4	5
9.	I frequently compare myself to others.	1	2	3	4	5
10.	I find it difficult to hear criticism about myself.	1	2	3	4	5
11.	I tend to think negatively much of the time.	1	2	3	4	5
12.	I fear making a mistake which others might see.	1	2	3	4	5
	Healthy Lifestyle					
1.	I always taking care of my lifestyle.	1	2	3	4	5
2.	I always discuss my problems and concerns with people close to me.	1	2	3	4	5
3.	I always get enough sleep.	1	2	3	4	5
4.	Feel I am growing and changing in positive ways.	1	2	3	4	5

5.	I always accept those things in my life which I cannot change.	1	2	3	4	5
6.	I have my own specific methods to control my stress.	1	2	3	4	5
7.	I am able to balance my time between study and personal matters.	1	2	3	4	5
8.	I believe students' mental health problem is affected by their lifestyle.	1	2	3	4	5
9.	I am facing difficulties in getting rid of some of my bad habits.	1	2	3	4	5
	Learning Adaptability					
1.	I am able to work effectively with others.	1	2	3	4	5
2.	I have difficulties in understanding people of other racial and ethnic backgrounds.	1	2	3	4	5
3.	I am able to learn effectively on my own.	1	2	3	4	5
4.	When the material is too difficult, I only study the easy parts or give up.	1	2	3	4	5
5.	I can force myself to keep working on it until I finish it.	1	2	3	4	5
6.	I feel comfortable interacting with people of different race/ethnicity.	1	2	3	4	5
7.	I feel comfortable finding my way around campus and the community.	1	2	3	4	5
	Mental Health					
1.	I loss much sleep over worry.	1	2	3	4	5
2.	I felt constantly under stress.	1	2	3	4	5
3.	I am able to concentrate on what I am doing.	1	2	3	4	5
4.	I felt that I am playing useful part in many things.	1	2	3	4	5
5.	I am able to face up my problem.	1	2	3	4	5
6.	I felt capable of making decisions.	1	2	3	4	5
7.	I felt that I could not overcome my difficulties.	1	2	3	4	5
8.	I felt reasonably happy on things considered.	1	2	3	4	5
9.	I am able to enjoy my normal day to day activities.	1	2	3	4	5
10.	I been feeling unhappy/depressed.	1	2	3	4	5
11.	I have been losing confidence in myself.	1	2	3	4	5
12.	I have been thinking of myself as a worthless person.	1	2	3	4	5

Statistics

		Gender	Age	Marital_Status	Children
N	Valid	124	124	124	124
	Missing	0	0	0	0

Frequency Table**Gender**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	88	71.0	71.0	71.0
	Male	36	29.0	29.0	100.0
	Total	124	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25 years old	74	59.7	59.7	59.7
	26-35 years old	49	39.5	39.5	99.2
	36-45 years old	1	.8	.8	100.0
	Total	124	100.0	100.0	

Marital_Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	10	8.1	8.1	8.1
	Single	114	91.9	91.9	100.0
	Total	124	100.0	100.0	

Children

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	118	95.2	95.2	95.2
	Yes	6	4.8	4.8	100.0
	Total	124	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SE	124	2	4	3.25	.403
HL	124	2	5	3.51	.403
LA	124	3	5	3.49	.403
MH	124	3	4	3.34	.403
Valid N (listwise)	124				

Reliability

Scale: SE

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.703	12

Item Statistics

	Mean	Std. Deviation	N
SE1	3.87	.846	124
SE2	3.25	.888	124
SE3	3.70	.782	124
SE4	2.98	.931	124
SE5	2.98	1.020	124
SE6	3.46	.796	124
SE7	2.77	.964	124
SE8	3.45	.903	124
SE9	3.29	.978	124
SE10	3.08	.862	124

SE11	2.81	.888	124
SE12	3.42	.844	124

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
SE1	35.19	28.072	-.195	.752
SE2	35.81	21.572	.567	.651
SE3	35.36	27.798	-.166	.744
SE4	36.07	21.486	.543	.653
SE5	36.08	21.676	.455	.666
SE6	35.60	26.343	.007	.725
SE7	36.29	21.507	.515	.656
SE8	35.61	22.673	.413	.674
SE9	35.77	21.779	.471	.663
SE10	35.98	22.741	.432	.671
SE11	36.25	21.538	.572	.650
SE12	35.64	22.800	.437	.671

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
39.06	27.038	5.200	12

Reliability

Scale: HL

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.717	12

Item Statistics

	Mean	Std. Deviation	N
SE1	3.87	.846	124
SE2	3.25	.888	124
SE3	3.70	.782	124
SE4	2.98	.931	124
SE5	2.98	1.020	124
SE6	3.46	.796	124
SE7	2.77	.964	124
SE8	3.45	.903	124
SE9	3.29	.978	124
SE10	3.08	.862	124
SE11	2.81	.888	124
SE12	3.42	.844	124
HL1	3.63	.787	124
HL2	3.45	.922	124
HL3	3.13	.763	124
HL4	3.63	.660	124
HL5	3.34	.802	124
HL6	3.79	.644	124
HL7	3.44	.752	124
HL8	3.85	.803	124
HL9	3.35	.814	124

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SE1	66.79	45.365	.112	.721
SE2	67.41	41.944	.402	.696
SE3	66.96	45.773	.092	.721

SE4	67.68	42.570	.323	.703
SE5	67.69	42.884	.257	.710
SE6	67.20	44.194	.239	.710
SE7	67.89	41.880	.365	.699
SE8	67.21	42.453	.347	.701
SE9	67.37	42.302	.322	.703
SE10	67.58	41.996	.414	.695
SE11	67.85	42.378	.363	.699
SE12	67.24	42.900	.339	.702
HL1	67.03	43.749	.287	.706
HL2	67.21	44.653	.151	.719
HL3	67.53	46.285	.047	.724
HL4	67.03	43.416	.403	.699
HL5	67.32	44.070	.249	.709
HL6	66.87	44.932	.233	.711
HL7	67.22	45.225	.155	.716
HL8	66.81	44.472	.210	.712
HL9	67.31	41.401	.506	.688

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
70.66	47.359	6.882	21

Reliability

Scale: LA

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.505	7

Item Statistics

	Mean	Std. Deviation	N
LA1	3.77	.673	124
LA2	2.81	.925	124
LA3	3.57	.734	124
LA4	2.79	1.014	124
LA5	3.87	.775	124
LA6	3.79	.768	124
LA7	3.85	.722	124

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
LA1	20.68	6.204	.427	.400
LA2	21.65	6.816	.086	.543
LA3	20.88	6.465	.290	.448
LA4	21.66	7.657	-.107	.642
LA5	20.58	5.741	.470	.366
LA6	20.66	6.372	.290	.447
LA7	20.60	5.769	.518	.354

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.45	8.087	2.844	7

Reliability

Scale: MH

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.497	12

Item Statistics

	Mean	Std. Deviation	N
MH1	3.18	.758	124
MH2	2.97	.886	124
MH3	3.67	.596	124
MH4	3.61	.685	124
MH5	3.65	.677	124
MH6	3.50	.682	124
MH7	3.01	.936	124
MH8	3.84	.606	124
MH9	3.90	.882	124
MH10	2.70	.991	124
MH11	2.96	.936	124
MH12	3.11	1.031	124

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MH1	36.90	13.269	.170	.480
MH2	37.11	12.807	.187	.476
MH3	36.41	14.786	-.079	.528
MH4	36.47	14.481	-.033	.524
MH5	36.43	13.149	.239	.465
MH6	36.59	13.294	.205	.472
MH7	37.07	11.970	.298	.441
MH8	36.24	12.711	.394	.435
MH9	36.18	14.312	-.046	.541
MH10	37.38	11.713	.307	.436
MH11	37.12	12.141	.271	.450
MH12	36.98	11.221	.362	.415

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
40.08	14.780	3.845	12

Reliability

Scale: MH-1

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.541	11

Item Statistics

	Mean	Std. Deviation	N
MH1	3.18	.758	124
MH2	2.97	.886	124
MH3	3.67	.596	124
MH4	3.61	.685	124
MH5	3.65	.677	124
MH6	3.50	.682	124
MH7	3.01	.936	124
MH8	3.84	.606	124
MH10	2.70	.991	124
MH11	2.96	.936	124
MH12	3.11	1.031	124

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
MH1	33.00	12.754	.182	.528
MH2	33.21	12.234	.208	.522
MH3	32.51	14.809	-.186	.592
MH4	32.57	14.624	-.149	.594
MH5	32.53	13.005	.174	.529
MH6	32.68	13.513	.067	.551
MH7	33.17	10.700	.446	.447
MH8	32.34	12.473	.344	.496
MH10	33.48	10.547	.432	.448
MH11	33.22	10.878	.415	.458
MH12	33.07	10.544	.404	.457

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
36.18	14.312	3.783	11

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LA, SE, HL ^b	.	Enter

a. Dependent Variable: MH

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.227 ^a	.051	.027	.318

a. Predictors: (Constant), LA, SE, HL

b. Dependent Variable: MH

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.638	3	.213	2.098	.104 ^b
	Residual	11.759	116	.101		
	Total	12.397	119			

a. Dependent Variable: MH

b. Predictors: (Constant), LA, SE, HL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.574	.344		7.481	.000
	SE	.031	.069	.041	.442	.660
	HL	.152	.081	.190	1.889	.061
	LA	.039	.079	.049	.491	.624

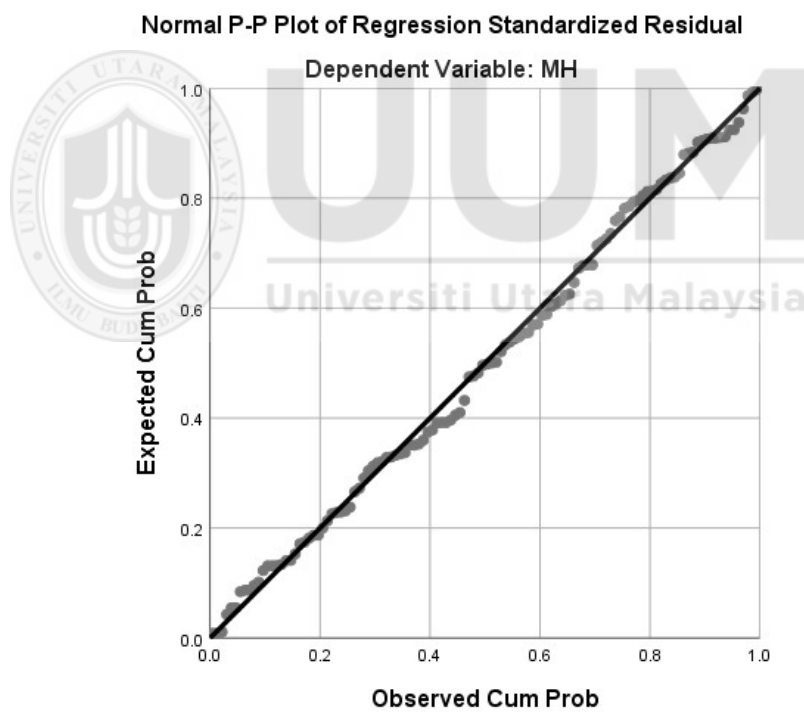
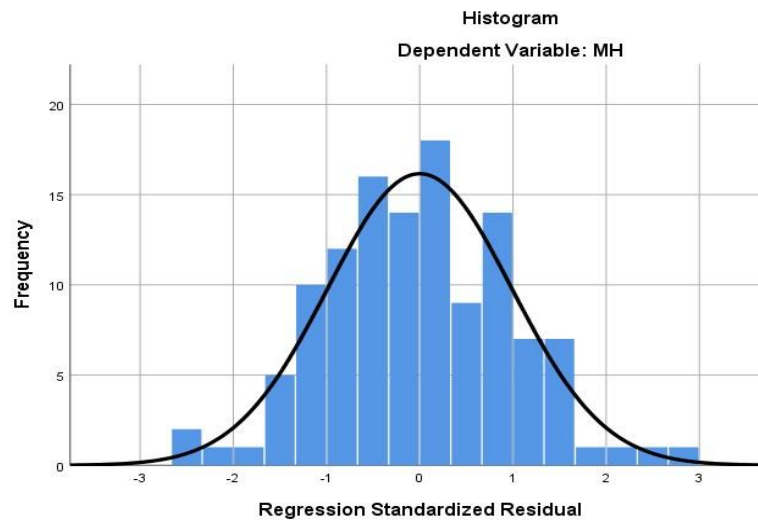
a. Dependent Variable: MH

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.13	3.59	3.34	.073	124
Residual	-.761	.938	.000	.314	124
Std. Predicted Value	-2.864	3.402	.000	1.000	124
Std. Residual	-2.390	2.948	.000	.987	124

a. Dependent Variable: MH

Charts



Correlations

		Correlations			
		MH	SE	HL	LA
MH	Pearson Correlation	1	.082	.212*	.118
	Sig. (2-tailed)		.371	.019	.195
	N	124	124	124	124
SE	Pearson Correlation	.082	1	.191*	.140
	Sig. (2-tailed)	.371		.036	.125
	N	124	124	124	124
HL	Pearson Correlation	.212*	.191*	1	.422**
	Sig. (2-tailed)	.019	.036		.000
	N	124	124	124	124
LA	Pearson Correlation	.118	.140	.422**	1
	Sig. (2-tailed)	.195	.125	.000	
	N	124	124	124	124

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LA, SE, HL ^b	.	Enter

a. Dependent Variable: MH

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.227 ^a	.051	.027	.318

a. Predictors: (Constant), LA, SE, HL

b. Dependent Variable: MH

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.638	3	.213	2.098	.104 ^b
	Residual	11.759	116	.101		
	Total	12.397	119			

a. Dependent Variable: MH

b. Predictors: (Constant), LA, SE, HL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.574	.344		7.481	.000
	SE	.031	.069	.041	.442	.660
	HL	.152	.081	.190	1.889	.061
	LA	.039	.079	.049	.491	.624

a. Dependent Variable: MH

Descriptives

Descriptive Statistics

	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
SE	124	-.070	.217	-.354	.431
HL	124	-.016	.217	.940	.431
LA	124	.467	.217	.787	.431
MH	124	.254	.217	.353	.431
Valid N	124				

Reliability

Scale: MHnew

Case Processing Summary

		N	%
Cases	Valid	124	100.0
	Total	124	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.541	11

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LA, SE, HL ^b		Enter

a. Dependent Variable: MHnew

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.208 ^a	.043	.019	.34197

a. Predictors: (Constant), LA, SE, HL

b. Dependent Variable: MHnew

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.615	3	.205	1.752	.160 ^b
	Residual	13.565	116	.117		
	Total	14.180	119			

a. Dependent Variable: MHnew

b. Predictors: (Constant), LA, SE, HL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.548	.370		6.895	.000
	SE	.033	.075	.042	.448	.655
	HL	.155	.086	.182	1.798	.075
	LA	.026	.085	.030	.299	.765

a. Dependent Variable: MHnew

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.0847	3.5391	3.2917	.07188	124
Residual	-.93038	1.02413	.00000	.33763	124
Std. Predicted Value	-2.880	3.442	.000	1.000	124
Std. Residual	-2.721	2.995	.000	.987	124

a. Dependent Variable: MHnew

Correlations

Correlations

		MHnew	SE	HL	LA
MHnew	Pearson Correlation	1	.079	.184*	.093
	Sig. (2-tailed)		.391	.041	.308
	N	124	124	124	124
SE	Pearson Correlation	.079	1	.191*	.140
	Sig. (2-tailed)	.391		.036	.125
	N	124	124	124	124

HL	Pearson Correlation	.184*	.191*	1	.422**
	Sig. (2-tailed)	.041	.036		.000
	N	124	124	124	124
LA	Pearson Correlation	.093	.140	.422**	1
	Sig. (2-tailed)	.308	.125	.000	
	N	124	124	124	124

*. Correlation is significant at the 0.05 level (2-tailed). **.

Correlation is significant at the 0.01 level (2-tailed).

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	LA, SE, HL ^b	.	Enter

a. Dependent Variable: MHnew

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.208 ^a	.043	.019	.34197

a. Predictors: (Constant), LA, SE, HL

b. Dependent Variable: MHnew

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.615	3	.205	1.752	.160 ^b
	Residual	13.565	116	.117		
	Total	14.180	119			

a. Dependent Variable: MHnew

b. Predictors: (Constant), LA, SE, HL

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.548	.370		6.895	.000
	SE	.033	.075	.042	.448	.655
	HL	.155	.086	.182	1.798	.075
	LA	.026	.085	.030	.299	.765

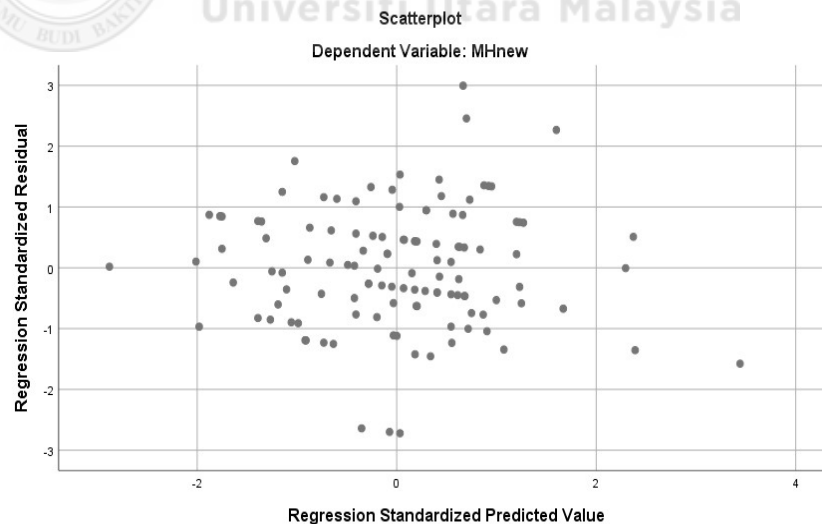
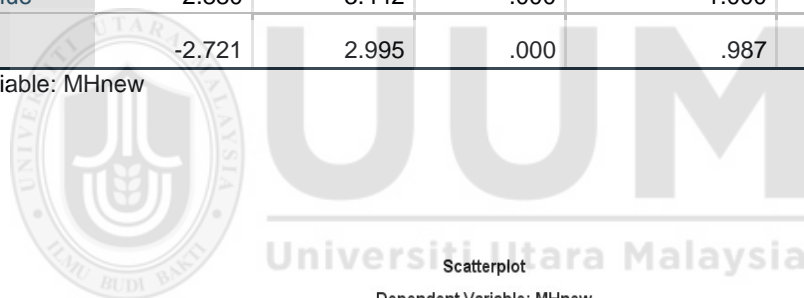
a. Dependent Variable: MHnew

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.0847	3.5391	3.2917	.07188	124
Residual	-.93038	1.02413	.00000	.33763	124
Std. Predicted Value	-2.880	3.442	.000	1.000	124
Std. Residual	-2.721	2.995	.000	.987	124

a. Dependent Variable: MHnew

Charts



Descriptives

Descriptive Statistics

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
MHnew	124	.101	.217	.809	.431
SE	124	-.070	.217	-.354	.431
UL	124	-.016	.217	.940	.431
LA	124	.467	.217	.787	.431
Valid N	124				



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